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ABSTRACT

The effectiveness of Phare vocational education and training (VET) reform programs conducted in 13 Eastern and Central European countries in 1993-1998 and lessons learned from the programs were examined through a review of information from the following sources: a cross-country analysis on curricular reform; a review of technical evaluation reports on 10 of the 13 countries; and ad hoc interviews with key participants in the programs. The reform efforts were found to have been especially successful in those countries where the national, regional, and local levels had worked jointly to achieve common targets in a complementary top-down and bottom-up approach. The following were among the key lessons learned: (1) countries need time and resources to reflect upon different VET methodologies and adapt them to their own local contexts; (2) local actors should be empowered to develop solutions that work in their specific country contexts and cultures; (3) VET reform should be a combined learning and strategic development process; and (4) VET policies should be embedded within a lifelong learning context. (Ten appendixes detail the main outcomes and findings from Phare VET reform efforts in the following countries: Estonia; Latvia; Lithuania; Poland; the Czech Republic; the Slovak Republic; Romania; Bulgaria; Slovenia; and Albania.) (MN)

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REPORT

Review and lessons learned of Phare Vocational Education and Training Reform programmes 1993 - 1998

January, 2001

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The European Training Foundation is an agency of the European Union which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States, Mongolia and the Mediterranean partner countries and territories. The Foundation also provides technical assistance to the European Commission for the Tempus Programme.

This report was prepared by Evelyn Viertel and Peter Grootings of the European Training Foundation.

REPORT

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1. Background

Between 1990 and 1998, Albania, Bulgaria, Bosnia and Herzegovina, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Poland, Romania, the Slovak Republic and Slovenia received approx. € 80 million from the European Union's Phare[1] budget to assist the reform of their education and training systems. Romania received the biggest share amounting to € 25 million.

The European Commission entrusted the European Training Foundation with the management of the majority of these programmes. In this review, the programmes listed below will be considered, as they were both finalised at the time of writing this paper and sufficiently similar in terms of their content.

Title of the programme	Budget (€)
Phare VET Reform programme in Estonia (ES9409):	3 million
Phare VET Reform programme in Latvia (LE9408):	3 million
Phare VET Reform programme in Lithuania (LI9410):	4 million
Phare IMPROVE programme in Poland (PL9416) as a follow-up to the Phare UPET programme:	4 million
Phare VET Reform programme in the Czech Republic (CZ9305):	4 million
Phare VET Reform programme in the Slovak Republic (SK9403):	4 million
Phare VET Reform programme in Romania (RO9405):	25 million
Phare Vocational Education and Training; Education; Research, Science and Technology (VETERST) in Bulgaria (BG9506 - € 9 million in total) – this review will consider only the a) Upgrading VET (€ 3.7 million), b) Teachers Career Path (€ 0.4 million) and c) Financing and Management of Secondary Education (€ 2.5 million) components	6.6 million (covering 3 components of VETERST)
Phare VET Reform programme in Slovenia (SL9405):	3 million
Phare VET Reform programme in Albania (AL9506):	0.7 million

The wider objective of the Phare Vocational Education and Training (VET) Reform programmes was to assist the Governments of beneficiary countries in modernising and reforming (mainly) the secondary vocational training systems as key elements in the social and economic reform processes.

The immediate objectives of the majority of the programmes included:

a) the modernisation of a number of existing and the development of new curricula with the aim of providing training for a range of rather broad-based occupations, partly within new sectors of economic activity;

1 The Phare Programme is a European Union initiative which provides grant finance to support its partner countries in central and eastern Europe to the stage where they are ready to assume the obligations of European Union membership.

b) staff development on a wider scale, including training for policy-makers, education administrators at all levels, representatives from employers' and employees' organisations, school managers, curriculum authors and teachers;

c) the upgrading of school equipment in selected pilot schools;

d) the establishment of partnerships with schools and other training institutions in European Union Member States; and,

e) support to both the policy and institutional development in vocational education and training and the dissemination of pilot school results.

Variations in the design of the Phare VET Reform programmes included:

- Poland, with an additional component to introduce core skills in the curricula of elementary and general secondary schools, the so-called KREATOR programme; and,
- Bulgaria with an additional component to design a decentralised information and financial management system for all secondary schools.

2. Purpose and methodology of this review

The purpose of this review is to illustrate the logic and methodologies of interventions in the vocational training sector by analysing in particular Phare VET Reform programme interventions between 1993 and 1998. This way a useful learning tool shall be provided for managers designing or implementing future vocational training reform programmes.

Work was undertaken to (a) review documents provided by the European Training Foundation, external contractors and counterparts from the given central and eastern European countries, (b) draft this review and (c) revise it in the light of comments received from Foundation programme managers.

Information about the programmes was gathered from:

- a cross-country analysis on curricular reform drawn up on behalf of the European Training Foundation at an interim stage of Phare VET Reform programme implementation[2];
- a review of technical evaluation reports drawn up on each of the 10 individual programmes by the following external contractors:

Programme	Technical audit company
Estonia (ES9409):	DEL, Denmark
Latvia (LE9408):	FTP International, Finland
Lithuania (LI9410):	SQA, UK
Poland (PL9416):	AmuGruppen, Sweden
Czech Republic (CZ9305):	Group of international consultants
Slovak Republic (SK9403):	Mecca Consulting, Austria
Romania (RO9405):	DEL/Aalborg Technical College, Denmark
Bulgaria (BG9506):	AmuGruppen, Sweden
Slovenia (SL9405)	ÖIR, Austria
Albania (AL9506):	International Training Centre of the ILO

and

- ad hoc interviews with key participants in the programmes.

2 Parkes, D., Grootings, P., Gronwald, D., Nielsen, S. (1999): A Cross Country Analysis of Curricular Reform in Vocational Education and Training in Central and Eastern Europe, European Training Foundation publication.

3. Programme design and management

3.1 *Programme design*

Vocational education and training has usually been seen as occupying a priority in the education systems of central and eastern European countries lower than that of general and higher education. Support to reform the vocational training sector has therefore not been a foregone conclusion. It was very often the European Commission, in consultation with the countries themselves, which took the initiative to include assistance to vocational training reform in the Phare programmes. In the majority of countries Phare represented the first major investment in the vocational training sector.

Most of the programmes followed an almost identical design with the main emphasis put on curriculum change in a limited number of pilot schools. The programme documents were written in measurable terminology, i.e. in terms of the number of curricula to be produced or schools to be involved, etc. However, the "Policy development and dissemination" component left some flexibility in each of the programmes to support the much needed conceptual re-design of the whole vocational education and training framework and infrastructure.

Poland is an example where national actors (mostly outside the ministries) inspired the design of successive Phare programmes, following a fairly logical sequence of vocational training reform activities.

In contrast, components subsumed under the Bulgarian Phare 1995 VETERST programme offered little potential for synergy and coherence. The Bulgarian Government tried to address issues of immediate concern, such as the upgrading of vocational training, teacher career paths, foreign language training, financial management for secondary school education, development of science and technology, school dropouts from general education, a Higher Education Evaluation and Accreditation Agency and a Science Park feasibility studies.

It could be suggested that the original design of the programmes with their imminent focus on quantified curriculum development goals and the pilot school approach was weak in that not enough emphasis was placed on the development of policy and this will have an effect on the sustainability of the results of the programmes.

Recommendations in this context will be made in the final chapter of this paper.

3.2 *Programme management*

Steering Committees and Programme Management Units

To run the programmes and handle related complex administrative operations, Programme Management Units (PMUs) and Steering Committees were set up in all countries in question. PMUs employed local staff and long term international consultants.

The role of the Steering Committees was to:

- monitor the overall activities of the programme, as agreed in the Financing Memorandum;
- work closely with all ministries, pilot schools, industrial organisations and other representatives to take into account the complexity and ensure the transparency of the reform programme;
- guide and monitor the development of work programmes;
- approve all criteria applied within the programme;
- ensure that all reporting and legal requirements of both the European Commission and the national authorities were met; and
- advise the Director of the PMU on all major issues.

Apart from Bulgaria where a Steering Committee was not set up before the end of 1998, Steering Committees, often composed on a tripartite basis, showed great interest in the programmes, acting in an advisory capacity and giving formal approval to activities within the programme. The stress was laid on partnership development, stimulating a positive attitude towards social dialogue and joint decision-making.

One of the most important outcomes is that many of the Committee members now serve on permanent advisory bodies for vocational education and training, such as national vocational training councils, White Paper development groups or tripartite branch committees. There is evidence therefore that the Phare programmes have been influential in instigating working relationships that will endure beyond the period of these programmes.

Responsibilities of the PMU staff included:

- the establishment of PMU offices at the start of the programme, staff selection and staff training;
- strategic and work programme planning and reporting;
- organisation of steering committee meetings, national meetings, seminars and conferences;
- ongoing liaison with key stakeholders in the vocational training field;
- organisation of all procurement operations following Phare rules;
- management of short term technical assistance involvement; and
- attendance at international events.

PMUs were established either as part of or at least strictly supervised by the beneficiary ministries (Bulgaria, Slovenia), as part of ministries but enjoying some degree of independence in programme management (Albania, Latvia, Lithuania, and Romania) or in legal entities outside the ministries (Estonia, Poland, Czech Republic). These three models had both their strengths and weaknesses in terms of effectiveness, efficiency and impact on policymaking. However, in the end the actual location of PMUs within the national structure was not a deciding factor in whether or not pilot school activities were implemented effectively and had an impact on national level policy and decision-making. Effectiveness and impact were very dependent on the interest shown in vocational training reform from the side of policy-makers in the Ministry of Education, while efficiency depended very much on the project management skills of PMU staff and the long-term international experts who supported them.

The overall management of the programmes by the PMUs can be considered a factor in their success. Overall, there was stability of personnel in the PMU and the staff there considerably grew in experience and confidence, as programmes progressed. PMU staff generally displayed tremendous

commitment and enthusiasm and in most countries have developed into a kind of vocational training reform 'pressure' group.

The project management skills and knowledge of EU programmes and procedures developed by PMU staff will be a real asset in preparing for EU accession.

The preparation, negotiation, processing and monitoring of a great number of contracts was burdensome and time-consuming for the PMUs. On the other hand, the detailed elaboration of terms of reference provided clear directions to the participating institutions. In many countries this has been a new way of working together, as it also implied some form of reporting, monitoring and assessment of progress - something that partners had clearly not been used to do before. Also in that sense the Phare VET Reform programmes have contributed to a learning process and to a culture of promoting and guiding initiatives at the grass roots level. A novelty in partner countries' practices and a particular impetus for joint development work at school or local level has also been the invitation to send and select project applications from schools on a competitive basis.

European Training Foundation support

Due to its additional staff resources, more streamlined procedures and sector expertise, the European Training Foundation has managed to avoid major problems in the implementation of Phare VET programmes, as has been the case with Phare programmes in other sectors[3]. There has been evidence of an improvement in the quality of programme management, underpinning and complementing the decentralised management approach of Phare.

The technical evaluation report on the Phare IMPROVE programme in Poland states in this context: *"The EU management of the programme was transferred from Brussels to the European Training Foundation in 1995. According to the PMU this has meant a higher level of technical backstopping and a more prompt response to practical questions."*

Apart from the close monitoring of the programmes by the Foundation's country managers, Phare countries benefited from complementary activities carried out or commissioned by the European Training Foundation which, overall, contributed to an exchange of experience between country actors themselves and a better embedding of pilot projects in broader reform strategies.

3 In his address to the press conference of 17 May 2000 on the reform of EU external assistance management, Commissioner Chris Patten raised the issue of poor quality and slow delivery of such assistance. According to him, this was due to the substantial growth of EU external assistance on the one hand and a lack of staff resources, as well as rigid and outdated procedures on the other. He also mentioned both the failure to ensure that programmes reflect policy priorities and the issue of weak programming. As a result, there was a growing backlog of over € 14 billion outstanding commitments awaiting payments - just for Phare.

4. Analysis and assessment of programme outputs

4.1 *Background*

Vocational education and training reforms were launched in central and eastern European countries in an extremely difficult and unstable economic and social context. Other government policies, such as labour, treasury, the economy in general etc., had to be taken into consideration before decisions on vocational training could be advanced. The scale of vocational training reform and the prerequisites in place or rather not in place do not therefore compare to any reforms undertaken in established societies of EU Member States. Vocational training reforms in central and eastern Europe were dictated by the fact that fundamental changes in both the economy and the society had left an unadjusted vocational education and training system still catering to the needs of the formerly state-planned economy and traditional industries.

The main drawbacks of the first phase of vocational training reforms in the countries include the fact that reform programmes were generally launched with little labour market information. Many evaluation reports confirm the difficulty of undertaking a comprehensive curricular reform in the context of a largely non-transformed economy.

In addition, there was generally no credible vocational training research and development capacity that could have informed policy debates in the countries. Even where there had traditionally been a high level of research in the field of pedagogic and learning psychology, its contribution to reform was limited. In general, academic circles were scarcely involved, partly due to the fact that resources of corresponding institutions had been cut back dramatically.

The trust of the Phare VET Reform programmes was mainly been on education planners, social partner representatives, school managers and teachers whose involvement in policy-making, pedagogical, methodological and curriculum development had hitherto been very limited. All of them had to take on new roles and undergo a tremendous learning process, where trial and error naturally played an essential part. They showed commitment to the process in spite of both their rather insecure and low societal status and remuneration levels of both civil servants and teachers sometimes below the minimum levels required for living, such as in Romania or Bulgaria. Against this background, achievements made by all Phare VET Reform programmes in question are indeed impressive.

Any comments made have to be seen in the context of the extremely tight timeframes in which the programmes had to be implemented. The process of bringing together the "suppliers" of vocational training with the "demanders" has not been easy in any of the countries. It takes time, perseverance, finance and, above all, commitment to a vision, involving all interests, to produce a capable, competent, motivated and labour market relevant workforce. A three-year programme (the actual period of implementation was much shorter) represents a very short time span in what can be considered a very complex, lengthy - and actually never ending - education and training reform process.

The short lifetime of initiated reforms also creates difficulties in measuring the impact of Phare VET Reform programmes. To date there has not been any tracking of programme participants or non-participants for more than one year. The full impact of training policies is likely to play out only after another two or three years.

4.2 *Summary of programme outputs*

Comparative analyses of post-communist countries reveal four types of education reform:

1. **Corrective reforms** that are initiated with immediate reparatory objectives[4];
2. **Modernising reforms** that are interventions aimed at reducing gaps and catching up with Western institutions. They are especially active at the level of curricula, teaching and learning methods, examinations, and school textbooks;
3. **Structural reforms** that are targeted at the structures, legal framework and management of education systems;
4. **Systemic reforms** that are deeper and have a global character because they call for a genuine change of paradigm in terms of education policy. They are aimed not only at the curricula or the legislative framework but at the very internal logic of education and its relationships with the global social system. A systemic reform examines the key elements of every education policy: the role of the state, relations with the labour market, the financing system, efficiency control, the normative role of national standards, etc.[5]

The countries in question have, with a few exceptions, not proceeded to systemic reform yet. Most of them are still at the stage of modernisation/restructuring.

The dilemma with any vocational education and training reforms is that their ambitions go far beyond the sector itself; they are embedded in the transformation realities of the national contexts. Although paradigms in education and training have started to change, the institutions and mechanisms underpinning these new paradigms had not yet been present or fully operational in central and eastern Europe. They remain to be developed, as will be further discussed in the final chapter of this paper.

The main impacts so far of the 'pilot school' initiatives on (initial) training include the following:

- A change of the pedagogic attitude of teachers (and students) towards both curricula more oriented towards (new) labour market needs and active learning styles, which ultimately increase the employment prospects of graduates;
- a change in the schools' management style;
- new syllabuses, equipment and materials which have been developed to a coherent design;
- improved communication between ministries of education and labour and other sector ministries bearing responsibilities for vocational training, regional and local administrations, central employers' and employees' organisations, training institutions and individual employers;

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4 Birzea, C. (1997): The Dilemma of the Reform of Romanian Education: Shock Therapy, the infusion of Innovation or Cultural Decommunization? In: Higher Education in Europe, Volume 22, No. 3, 1997.

5 Grootings, P. (1993): VET in Transition: An Overview of Changes in three East European countries, in: European Journal of Education, Vol. 28, n° 2.

- the drafting and adoption of vocational training policy papers and legislation, involving key stakeholders in the design process;
- a positive attitude towards the opportunities which greater decentralisation of the management of education and training offers both to training institutions and local/regional authorities; as well as,
- new approaches to assessment and quality assurance in vocational education and training.

4.3 *Curriculum innovation*

Summary assessment

The Phare VET Reform programmes have, with varied success, followed a rather genuine pattern, with a curriculum development rationale emphasising:

- initial skills provision;
- a learner/student-centred outcome-based approach to pedagogy;
- the reduction of specialist areas;
- an integrated and vocational preparation approach to the first years;
- the introduction of core or key skills;
- a shift from an input to a competence-based output philosophy of assessing students' performance; and
- a closer relationship between schools and enterprises.

As mentioned before, the difficulty was that the instruments and institutions required to analyse labour market trends and training needs were not in place at the start of the first phase Phare VET Reform programmes.

Curricular reform was accompanied by a package including management training for school leaders, teacher training and equipment procurement.

The majority of countries opted for a modular approach to the curriculum which renders both flexibility to programme provision and review and the opportunity to better integrate initial with continuing training. However, there are large differences between the individual countries, as regards the various facets of a modular system and the necessary mechanisms and infrastructure which have been put in place to inform and support the curriculum design and assessment process.

The new concepts introduced include, amongst others:

- the elaboration of occupational profiles/standards, often based on the acquisition of overarching competencies, as starting points for curriculum development;
- the introduction of new subjects or curriculum areas, such as "applied informatics", "small business development" and "environmental protection" in Latvia or "information technology", "business studies", as well as "health, safety and environmental standards" in Bulgaria which also offer a European dimension to vocational training;

- development of key skills which increase the mobility and flexibility of graduates on the labour market and create the foundation for continuing vocational training;
- new, frequently competency-based assessment and certification taking into account occupational standards.

However, the following features were also common to the majority of programmes:

- The selection of occupations for curricular innovation was still more oriented towards current offer (in terms of school, staff and other resources) rather than future labour market demand. An indication of this phenomenon is the selection of agricultural occupations in almost all Phare VET Reform programmes despite the overall decline of the sector. In general, due to the lack of capacities, there was a lack of focus on new occupations as required by the emerging market economies, such as in the administrative and commercial and other service sectors.

  Evaluators of the Romanian Phare VET Reform programme found that some programmes still cater for traditional industries and big state-owned enterprises to which partner schools had formerly belonged. It was openly admitted e.g. in the mechanical school that only 20% of school-leavers might find a relevant job upon graduation.

- It is not certain whether there is a demand for even newly introduced vocational training profiles/ programmes.

  In Latvia curricula have been designed, for example, for two profiles – social care and rural tourism - for which currently no jobs are on offer.

- Due to the lack of inherent mechanisms to involve local industry in the curriculum design process, labour market relevance of newly developed curricula is not always guaranteed.

  An extensive review of all the curriculum development work undertaken primarily through external consultants will be required, for example in Lithuania.

- In Phare countries where primary education comprises only 8 or 9 years, secondary vocational training has always also been seen as an extension of general education. Thus, large parts of the time spent in vocational schools are still used for general subjects taken from the curricula of general secondary schools (such as mother tongue, mathematics, foreign languages, etc.) The time left for the occupational preparation of students is limited. Hence, it is not certain whether the level of sophistication reached in the vocational training programmes is always high enough to meet society's needs for both well-trained skilled workers, technicians and foremen.

Good practice

The *'good practice'* models, which will be described in the following chapters,

- ➥ take central and eastern European country practices as a point of reference and not those of highly developed countries with sophisticated vocational training systems;
- ➥ do not ignore the fact that the processes of implementing these models have often encountered difficulties and require, hence, a continuous review and adaptation to suit the given country context;
- ➥ are not meant to exclude out that there has been good practice also in other Phare VET Reform programmes.

"Good practice" model – Curriculum innovation in Romania

Before deciding on a curriculum model, Romania had studied the systems of different countries. Vocational training curricula are devised according to a modular system and have been developed for two levels:

- Vocational school level: skilled worker qualification (CEDEFOP level 2 equivalent)
- Post Secondary education level: technician qualification (CEDEFOP level 3 equivalent)

Vocational training standards as the basis of formal curricula define the objectives and goals of the training, the graduates' necessary knowledge and skills for various occupations and specialisations, and recommended forms of final examination.

The definition of training standards is based on the following principles:

1. Modularisation;
2. School flexibility in training;
3. The modernisation of the evaluation system.

The modular system is conceived to increase the adaptability and mobility of the system. In order to comply with the overall reform measures in the secondary education system, the curricular structure consists of a core curriculum covering 70% of the nationally defined contents and curricular units to suit local needs which cover the remaining 30%.

Vocational training standards as the basis for the formal curriculum have been structured into three training categories based on the principle of broad-based initial training and progressive specialisation:

A. The "general culture training" or broad-based training component (providing for basic training in the first year for a large group of occupations, frequently belonging to more than one occupational family, which share common elements/competencies);

B. The "basic, general training for occupational groups" component (training for a large group of occupations in the second year, frequently belonging to more occupational families, to develop common technical competencies for all these occupations);

C. The "specialist training for an occupation or specialisation" component (modularly organised speciality training for the third year and sometimes also the second year, which ensures the development of specific competencies in a certain occupation. A fourth year of training in some occupations is offered to ensure a deeper specialisation or to bridge the gap in occupations where employment is not allowed before the age of 18.

A first revision of curricula as a result of both the accumulated experience from practice, and the availability of (some of) the occupational standards led to an even more flexible approach. The structure and taxonomy of the occupational competencies were rethought from the perspective of evaluation and examination in relation to the competency (attainment) levels. Competencies are described in terms of final requirements to be examined through tests. Related curricula are output-oriented. In the present form the vocational training standards describe the essential competencies to be acquired for gaining the vocational qualification. These competencies are defined in 3 categories of integrated capacities (theoretical and practical):

1. of knowledge,
2. of skills/practice, and
3. of personal and social competencies.

To support the implementation of new curricula, a number of methodological and didactical "training packages" has been developed. A team of experts producing, as a support to teachers, methodological guides, didactic units of media usage, training portfolios and the practical training project has backed up the curriculum authorship. Notebooks containing worksheets for students have been drawn up to accomplish theoretical and practical tasks. Work projects on different issues to be used by instructors/foremen in the practical training have been drawn up to support the instruction in the workshop, laboratory or the training taking place in companies.

The Phare project has also set up a new system of assessment and certification: competence-based and organised on the basis of co-operation between vocational training school teachers and the relevant social partners. An additional certificate, which specifies the competency level reached, is annexed to the ordinary "diploma". This is an intermediate step towards the introduction of a transferable credit system. The evaluation of students is performed in as real situations as possible by testing the abilities with specific work tasks. The beneficiaries of the trained labour force, i.e. the employers, are part of the evaluation committees.

New subjects have been introduced in the first year: foreign language, information technology; in the second year: civic behaviour; and in the third year of study: entrepreneurial training.

Recommendations

A critical review of the existing curricula from a more global point of view is needed. It would be worthwhile to carry out more in-depth studies of some of the curriculum development projects undertaken. Findings could serve as an illustration of how the curriculum matches the needs of the occupational sector and how schools work in partnership with a number of private companies to ensure that students get relevant practical experience. In most central and eastern European countries practical assignments (work) are still often seen as "unreflected doing" instead of being part of a wider learning process aiming at the development of competencies.

The following is recommended:

1. Too much emphasis has been put on traditional industries. It would be advisable to concentrate efforts on developing the educational answers to the emerging job profiles in the future economic growth sectors, such as the ICT, agro-industrial and service sectors.
2. More recent studies into the modular curricular system indicate that there are far greater problems in practical implementation and module combination than initially expected. Those countries which have opted for a modular approach should reconsider whether they have the resources to fully implement this system.
3. Central and eastern European countries may resist the temptation to shorten initial training periods, advocating an early "narrow track training" approach without a broader based occupational preparation or foundation training, with all the ensuing negative consequences for lifelong learning and employment.
4. Curriculum design activities have to be expanded quickly to cover other than the few pilot areas. To this end, extensive support should be given to both the trained curriculum designers to develop further job families within the agreed curricular system and the development of other curriculum designers through a cascading training effect in the schools being 'satellites' to the pilot schools, to begin with.
5. Although the Phare VET Reform programmes have covered some ground in this field, there is a lack of focus in the curriculum design process on work process knowledge, on job construction in companies, on job analysis and on how learning takes place on the job. Curriculum innovation needs to be linked to the identified skill needs.
6. In some countries core skills have been designed and are "taught" as separate modules, such as the entrepreneurship modules developed, for example, in Latvia, Romania or Bulgaria. However, what the concept of core competencies is all about is its horizontal integration within the whole vocational training curriculum. Core competencies require a departure from subject-based curricula. They can best be developed through active types of learning in project-type assignments, requiring interdisciplinary skills and an integration of work and learning.

7. Practical and in-company training components of curricula need to be elaborated in a more detailed way.

Many of the above mentioned challenges require a much better interrelation between the world of education and the world of work. As a consequence, the role of social partners at local level would have to be "institutionalised", a review of the (legal) status of vocational schools (governing bodies, school companies, key stakeholders) would need to be undertaken and local mechanisms for analysing training need to be put in place.

4.4 *School manager training*

The training of school managers was recognised in almost all Phare VET Reform programmes as being key to promoting the development and implementation of new curricular approaches and teachers' roles. Training for (pilot) school directors included:

- issues of strategic management,
- funding and school budgeting,
- personnel management,
- the management of change,
- (local, national and international) networking, and
- marketing.

Summary assessment

School managers were reported to be positive about the impact of their training. They have begun to formulate mission statements, strategic plans and development plans linked to the quality of their institutions. They are mostly receptive to the idea of devolving responsibility away from the State down to local levels. Most of the managers credit the Phare programmes with introducing to them the idea of being entrepreneurial and generating income - the idea of colleges as companies.

However, one teacher from a vocational school in Medias, Romania, said that *"before everything was politically driven, now it is totally economically driven. My young colleagues who used to work as curriculum designers have been restricted. But, of course, the new focus is relevant for our students."*

Good practice

"Good practice" model –
School manager training in Estonia

Following an individual needs analysis conducted by the international school management technical experts with all the pilot school directors, a special management development programme was designed. This involved seven national workshops delivered by international experts, supported by eight home-based workshops (involving small groups of the school management delivered by two local school management experts).

These two local experts were contracted to support the implementation of management reforms at school-based level, through involvement in the national workshops and the delivery of the home-based workshops followed by in-school technical assistance. This school management programme - involving the 13 school management and their deputies lasted 14 months.

By the end of the programme each school had developed:

- a strategic plan for the school,
- an operational programme on the implementation of the plan and,
- a marketing plan for the school.

Copies were sent to the Ministry of Education for comments and observations. Another feature of this programme was the involvement of ministry personnel both in the participation and the delivery of formal inputs.

Support material on all the formal inputs were prepared and translated into Estonian. Subsequently these materials were published in the form of a manual and distributed to vocational school management within the Estonian education system.

The following topics were delivered during the national workshops:

1. the role of the school director in a changing economic and social environment;
2. school financing;
3. total quality management;
4. strategic planning;
5. marketing;
6. preparing operational plans;
7. self evaluation techniques.

Recommendations

The Romanian evaluation report states that there is "a need for a new round of training for school managers. What is needed is a stronger ability to draw up strategic plans and business plans for the vocational schools. In the harsh economic situation in Romania schools will have to rely partly on self-financing mechanisms. Training for all vocational school directors should be organised in each district and already trained school managers should act as trainers."

The following is recommended:

1. Rather than training on how to run schools like small businesses, school managers' skills should be developed in the fields of **strategic thinking and planning of resources** with the aim of developing innovative projects for the schools, taking into account national priorities, regional human resource development strategies, as well as local needs.

2. Sustainability of the reform will require incentives, coaching and strong involvement of school leaders in the content side of vocational training programmes in the coming years. It would be advisable to provide programmes for school managers and representatives from regional/local education authorities in innovative pedagogical leadership to enable them to play their expected facilitating role in the ongoing and actually never-ending curriculum innovation process.

3. A quality assurance framework that assures the quality of assessment of training programmes, the teaching and the learning process and the management of the training institutions should be put in place. Through the Phare VET Reform programmes awareness was raised about the concept quality in a modern vocational education and training system and many approaches were examined, including quality management systems and systems to evaluate the quality of teaching and learning. A self-evaluation system backed up by monitoring from the local/regional level may be feasible, also as a sound basis for restructuring and rationalising the vocational training system linked to the concept of quality management and performance indicators.

4.5 *Teacher training*

Teacher training featured heavily in the Phare VET Reform programmes. Extensive programmes of teacher training seminars and workshops were run. In addition, there was training for curriculum designers and training on the new equipment installed throughout the programmes. Training was carried out in the following areas:

- functional analysis and occupational mapping;
- standards;
- curriculum development via a modular approach;
- learning materials;
- teaching and learning methodologies;
- general subjects and core skills;
- occupation-specific training;
- assessment and certification procedures;
- quality assurance.

Summary assessment

The training carried out through the programmes has made a real contribution to raising awareness about new approaches in vocational training. Many new concepts and activities have been introduced over the period of the programmes.

As an example, Slovenian teacher-trainers were selected and trained on an innovative project method – training for learning in the future technology (LIFT), apart from the training on curriculum development and planning of delivery, new learning methodologies and the evaluation of curricula.

Many teachers were reported to speak articulately and enthusiastically about the idea of the teacher as a facilitator and the shift in emphasis from teaching to learning.

In terms of sustainability, training packs are available for dissemination and trained teachers themselves represent a resource for the countries to cascade their experience to colleagues in Phare and non-Phare schools.

The results of their training are that teachers are now keen to move forward and implement systems of (modular) programmes, national assessment and quality assurance systems across the board. The training they have received from the Phare programmes has also enabled them to make a valuable contribution to the debate on future policy for vocational training and prepared them for implementation. They are now seeking both guidance from the ministry as to which systems will be adopted for the country and support - also in financial terms.

However, none of the Phare VET Reform programmes in question provided any concept for a systemic overhaul of both the pre-service and in-service vocational teachers' and trainers' training systems.

Another shortcoming mentioned for some countries, such as the Slovak Republic, Romania or Slovenia, was that curricula had to be developed before teachers or other participants had been trained. Thus, teachers had to perform their task without specific training or guidance, which often made them feel overcharged and also had repercussions on their motivation.

Good practice

Good practice model - Teacher Training in Poland

The teacher training component provided training for the teachers in pilot schools implementing the new curricula in selected vocational areas. The training was implemented in three phases:

Phase one: Methodology

Phase two: Specialised training in areas common to more than one vocational profile

Phase three: Specialised training based on identified training needs within each vocational profile (e.g. Computer-numerically controlled (CNC) programming)

The training was implemented with the help of foreign assistance at the four regional training centres. Tutors were recruited from the different curriculum development groups. Extensive support material in the form of syllabuses, standard descriptions of tests, etc. was provided to the participants.

In addition to the training in Poland, two study visits were paid abroad. 40 people participated in these study visits which resulted in the preparation of action plans covering long and short-term development measures.

As the participation in each training activity was limited, all those who participated in any of the activities were obliged to disseminate the information to their colleagues upon return to their respective schools. In many cases the activities were documented and in printed form distributed to interested schools and organisations.

In addition to the curriculum development and technical training aspects, the teacher training programme also included a component concerned with the evaluation of teaching methods and the effectiveness of training in a broader sense. The development of instruments for teachers' self-evaluation made it possible to monitor their own performance in a non-threatening way and not only through third-party inspectorates. Students expressed satisfaction with their teachers and the new methodology by saying "we are given more responsibility", "the teachers put more trust in us", " we are treated more like partners" or "there is less stress because we know what is expected from us".

Recommendations

The following is recommended:

1. Much more attention is needed to improve learning environments and the learning process as such. This includes the changing role of teachers as organisers of learning processes as opposed to transmitters of knowledge and skills, as well as a review of the contribution that classroom and work places can make to the acquisition of occupational competencies.
2. There is a risk that the sharp focus on labour market relevance has been at the expense of attention towards the individual learner. An increased awareness of and capacities for critical reflection on existing and new learning arrangements should be promoted.
3. Pilot and non-pilot schools require continuous support if they are to adopt the new approaches to curriculum development and teaching and learning. The teachers-disseminators and nominated mentors are expected to play a big part in providing this support. However, they themselves will require further training and support. Otherwise, some of the staff selected for this role may encounter problems and difficulties as they develop the cascade process because their skills are limited only to the experience gained on the projects.
4. There is an urgent need not only for an overall reform of the pre-service vocational teacher training system, but also for an intensive in-service training of teachers and trainers. Vocational teachers' and trainers' training is delivered by universities and other higher education establishments and is based on a curriculum, which is not sufficiently geared towards the future professional lives of teachers. Teachers should not only have academic studies and work experience, but must be able to convert this experience into their teaching concepts. Teachers and instructors/foremen should understand the organisation of workshops and be familiar with the work environment and its future development in companies. Their training should be geared more towards a co-operation with local companies, on the needs from the modern work process and the practice of modern learning processes. Technical assistance is further required for teachers and learners to design new co-operative vocational education and training processes.
5. There is a need for enhanced co-operation between teachers and companies at school and local level, as well as a need to review the role of universities in this field.
6. In EU countries when new developments are being introduced within the education system it is usual for staff who have key roles in the implementation to be temporarily seconded to national development teams. This alleviates the pressures and allows individuals to focus on the task in hand.

Overall, a systematic effort to reform the system of training for both vocational school teachers and workshop or company instructors might be considered to be more important in the next phase than continuous work on the specific curriculum development activities.

4.6 *Equipment procurement*

The upgrading of teaching equipment, which made up between one third and, in the case of Romania, 72% of the total programme budget, involved procurement activity for the pilot schools and the new curricula. Equipment needs analyses were drawn up, frequently with the assistance of foreign experts. Some PMUs (e.g. Lithuania, Romania and Bulgaria) contracted an EU Procurement Agency to assist with the procurement process.

Summary assessment

In none of the countries in question was an overall equipment policy or guidelines formulated and converted into an overall plan linked to a national equipment policy. The implementation of the equipment component was therefore guided by other considerations.

A major drawback in most programmes was the fact that the equipment specifications had to be drawn up and the procurement process started before the curricula had been finalised in order for the equipment to be installed within the time limit of the Phare programmes.

In some cases (e.g. Latvia, Poland and Bulgaria), equipment was installed with significant delay and therefore hampered the implementation of the new curricula. The procurement process appeared to have run smoothly once the PMUs had recognised the need for a skilled EU expert to assist them in what is a complex process. The result was that the equipment was installed and these PMU staff now have experience in organising tenders themselves. This will serve them well in future EU programmes. A user guide or procedures, respectively, for the procurement of equipment were produced, for example, in Lithuania and Slovenia.

In other cases the budget for equipment was not sufficient for those schools that required very expensive machinery.

One Lithuanian school that required expensive printing equipment was allowed to augment their equipment allowance by doing work for the programme, for example, printing materials.

Some problems occur or might occur in the future as to the servicing and maintenance of the expensive equipment purchased frequently from abroad and/or even cover the running costs (e.g. to pay for subscriptions or replace consumables). This may lead to the equipment either being not used anymore or locked up in a room with no access to the general public in schools.

In this context, both in Romania and Bulgaria pilot schools have not used or renewed their Internet subscriptions due to the relatively high running costs.

Overall, the fact that up-to-date training equipment has been delivered to the Phare pilot schools, but not to others, has divided the school landscape into "haves" and "have-nots". Due to very tight budgets, central governments are hardly able to replicate the model throughout the country, which puts the dissemination of pilot school experience and their integration in mainstream provision very much at stake.

Recommendations

The following is recommended:

1. An **equipment policy** would have to be defined at national level which contains two main elements:
   1) the preparation of a national standard of what can be considered minimum equipment requirements for each occupational area; and,
   2) the decentralisation of equipment procurement to local or regional levels.
2. Although a **decentralised approach** to equipment procurement should be favoured, a funding option should be kept at central level for disadvantaged regions. It is also recommended to maintain a facility at central level for the attraction of additional funding and co-ordination of purchases to obtain better conditions for schools in general (as is the case, for example, with software).

3. Technological developments have in many areas by far surpassed the level where it is possible or even advisable for each individual school to invest in highly sophisticated equipment. However, society demands highly skilled people. Solutions to this dilemma may include:

   - the increasing use, where appropriate, of equipment allowing for the **simulation** of more complex business operations (e.g. purchase, marketing and sales operations in simulated offices – e.g. "Lernbüro" model) or certain work operations (e.g. equipment to simulate the operations of a CNC machine);
   - the establishment of closer **relations by schools with industry** to be able to use or get equipment; and,
   - the clustering of schools into local or **regional learning centres** to make maximum use of facilities and resources for both initial and adult training.

4.7 *EU partnerships*

This component aimed at the development of partnerships between pilot schools and suitable partner schools in EU Member States. In this context, school directors, teachers and curriculum designers from Phare pilot schools benefited from international partnership visits.

Summary assessment

The EU partnership programme has brought considerable benefits to the pilot schools in terms of new materials, new ideas and raised awareness of EU practices in vocational education and training. Phare country school managers were exposed to new ideas of quality management systems and entrepreneurship, and the partnership programme was a great motivating factor for all managers and teachers involved.

Possibly the most significant benefit are the lasting partnerships which have started to bear fruit with the development of joint projects between Phare schools, such as in Estonia, Lithuania, Romania and Slovenia, and their EU partners. Some of these projects are co-financed by the EU Leonardo or Socrates programmes.

Lithuania even used the EU partnership component as the principle approach for the development of new curricula and the transfer of know-how to Lithuanian curriculum designers.

The Lithuanian evaluation report states in this context: "The successful transfer of technical know-how has greatly benefited the upgrading of subject specialisms."

However, it is a complex process to manage curriculum development when the responsibility lies with the EU partner schools – each is bound to have a different approach to developing modular curricula. Concerns were also noted with respect to the value of the partnership schools where respective schools had no experience in the development of modular curricula.

Recommendations

The following is recommended:

1. It would have been useful if a number of more targeted follow-up activities could have been at least co-financed.
2. The further promotion of links with schools from other countries can only be of benefit to schools in central and eastern European countries. Schools and colleges should be encouraged through support in the countries to establish links using EU projects. The current project offices might be used to assist schools and colleges to make successful bids for partnership developments through Leonardo, Socrates, etc.
3. It is recommendable that support structures are strengthened for the development of links of local and regional actors with EU Member States. This includes the training of school staff and other local partners in the design and implementation of local and regional development projects based on partnerships. The extraordinary commitment and communication skills found among staff in the vocational training system forms an excellent resource base that could be systematically developed further. Such support structures should also seek to attract, both at national and regional/local levels, additional resources for the intensification of the Europeanisation process.
4. Consideration might be given to extending EU partnerships from the school level to the level of ministries and national vocational institutions. This can bring benefits in terms of exchange of experience, materials and good practice. Once national qualification frameworks have been updated in central and eastern European countries, they will be in a stronger position to enter into "benchmarking" exercises with EU countries, comparing qualifications and contributing to initiatives for mutual recognition and transparency of qualifications in the EU.

4.8 Policy and institutional development

Many PMUs pointed out that at the start of the programmes there were neither the individuals nor institutions with the necessary skills, experience or wider understanding of modern concepts of vocational training to form policy. Activities under this component aimed to lend support to the development of national strategies for vocational education and training and the dissemination of the programme results. (The latter component will be dealt with separately in the following chapter.)

Summary assessment

The decentralised implementation of the Phare VET Reform programmes by involving, apart from ministry officials, schools and other local actors is quite unusual for countries with a long tradition of excessive state control. Decentralisation, or maybe more precisely deconcentration, has meant the transfer of more responsibility to regional or local levels, with increased opportunities for grassroots initiatives. Important decentralisation initiatives already taken[6] reflect the wish to enable a flexible provision of training that meets market requirements.

The Phare VET Reform programmes have made a major effort to both train and co-ordinate the input of various actors, including the social partners, at national, regional and local levels. Phare countries, including Estonia, Latvia, Lithuania, Poland, the Czech Republic and Slovenia, have,

6 For outcomes in individual countries see annexes.

following widespread consultation, by now developed policy papers that take account of the following principles of modern vocational education and training systems:

- new principles of decentralised management, involving tripartite decision-making processes at national and branch level;
- new, more flexible funding mechanisms to give more freedom of decision and room for innovations to institutions;
- the development of an integrated initial and continuing training system, making maximum use of resources;
- shifting quality control over provision from input (curriculum contents, staff requirements) to output criteria (qualification standards);
- introducing new horizontal and vertical pathways in the vocational training structure, including applied higher professional vocational courses and bridging courses between secondary general and post-secondary forms of vocational education, aiming at an increased horizontal and lateral mobility of students in the system; as well as
- a re-orientation of the focus of vocational training on labour market relevancy, on the one hand, and student ability, on the other, and the involvement of social partners in decision-making processes through the setting-up of structured communication mechanisms.

These policy papers, which have frequently been turned into White Papers, set out the vision for the development of the vocational education and training systems in the mid or even long term. It is recognised that the White Papers have been the most significant achievements of the Phare VET Reform programmes. The development of the papers brought together representatives of all the key stakeholders in vocational training and, although there may be some disagreement about the fine details, consensus has been reached on the general principles.

There is increasing recognition in central and eastern European countries that a skilled labour force is a key factor in attracting foreign investment and increasing export activity. The White Papers also make a valuable contribution to the pre-accession strategies of candidate countries, as they attempt to stimulate development of the vocational training system to EU standards and are in line with current EU priorities like equal opportunities, wide access and lifelong learning. Raising the quality and, hence, the credibility of vocational education and training at strategic level within central and eastern European countries is also seen to be crucial in attracting increased government funding for which all sectors are competing. Matching contributions from national governments are essential, if, for instance, European funding from the Structural Funds is to be attracted.

The environment in the above mentioned countries, due in large part to the Phare VET Reform programmes, is now much more conducive to focussing on strategic development. In this context, it was felt, amongst others, that the impetus provided for the development of the vocational training White Papers has had an impact on other education sub-sectors, such as higher education, encouraging them to produce their own and/or an overall White Paper on education.

Where vocational education and training legislation had already been adopted prior to the agreement of the White Paper, it is acknowledged that there may have to be additional regulations to supplement the vocational training laws, as the vocational training systems develop in line with the vision set out in the White papers.

In the Slovak Republic, Romania, Bulgaria and Albania, policy aspects and strategy issues were rather narrowly defined as questions of curriculum design, delivery and outcome. This was, of course, the most essential element of the Phare VET Reform programmes. However, vocational education and training reform is much wider than curriculum reform. Curriculum reforms are

embedded in complex transformation and policy contexts. Indeed, one of the problems of the Phare VET Reform programme implementation was the fact that, despite the changed transformation context, curricular philosophies were applied that were similar to those used before. In addition to the above mentioned policy and strategy aspects, there is a need for a comprehensive review of the progress made so far and a more overall planning of development in a number of areas within a consistent overall policy framework.

A very important achievement of the majority of Phare programmes has been the decentralisation of planning and the active involvement of social partners at different levels of the system. In this context, the following results have been achieved in most of the countries:

- social partner representatives, in particular employers, have been involved in tripartite structures at national, regional and local levels;
- relations have been (re-)established and improved between the initial vocational schools and local enterprises; and,
- a better balance has been established between the educational offer and labour market demands.

In addition, countries, such as Estonia and Lithuania, have started to set up tripartite trade committees aimed at the definition of skill and training needs by sector.

However, sustaining the partnership structures beyond Phare VET Reform programme implementation is not expected to be without any problems. In most countries, vocational training is not yet perceived as occupying a high rank in social partners', especially trade unions' agendas. The gradual establishment of national policy frameworks points to the development of participatory approaches to the vocational training system involving local authorities, social partners, companies, etc. However, the central state authorities retain a predominant role in policy-making, management and financing of the vocational training system. There is still a lack of a coherent and consistent national strategy and legislation promoting and underpinning a social dialogue culture at all levels. Thus, there may in some cases still be a lack of precise orientation, specific roles and clear mandates of the members of the various consultative bodies.

The Romanian evaluation report states: *"Meetings are very much dominated by the state representatives from ministry, centre and inspectorate – and the question was very often, and fully justified, asked by social partner representatives: what is our role here?"*

This may present a serious threat to the long-term sustainability of the social partner arrangements set up.

During the last 18 months of Phare VET Reform programme implementation, institutional development in the vocational training sector was borne by visionary management. The development of institutions was significant and will make a real, long-term contribution to the implementation of policy, as well as informing its development.

The institutions or bodies reinforced through or established during the lifetime of the Phare VET Reform programme, for example, in Lithuania include the Ministry of Education and Science, the National Vocational Education and Training Council, the National Standards Group, the Methodological Centre for Vocational Education and Training, the Industry Lead Bodies and the National Resource Centre and indirectly also other key national institutions and ministries.

In Romania the most important institutions include the Ministry of National Education and the Ministry of Labour and Social Development, the National Council for Vocational Education and Training Development, the National Council for Initial and Continuing Education, the Local Development Committees, the National Agency for Employment and Vocational Education and Training and the National Agency for Regional Development and their local branches.

However, the current institutional structures may not entirely be consistent and efficient enough in their interaction. This was partly due to the fact that the Phare VET Reform programmes were able to support institutional development only to a limited extent, ending before the new institutional structures were fully developed.

Recommendations

The following is recommended:

1. The production of a policy **White Paper** would give systemic weight to developments at policy level. Such papers typically contain indications as to required decision-making or even legislation, resources, institution-building both on the supply and the demand side, training of actors, labour market mechanisms, research and curriculum development capacities, etc. There should be acknowledgement that the policy papers developed are not stagnant documents and that they will require ongoing review, updating and debate. Mechanisms for continuity and sustainability should include the development of administrative procedures and structures to take innovative ideas forward in a routine way. Both vocational training research institutions and national vocational training councils may be the main focus for advising on future changes and developments with regard to both vocational training policy, legislation and initiatives.
2. Furthermore, it will be important to integrate the vocational training concept paper within an overall education policy framework that addresses all issues relevant to the development of **lifelong learning systems** (see also the final chapter of this paper).
3. Further **training of individual actors** may follow once the strategic decisions, for example on quality assurance and standards, have been taken so that the training is done in the context of the agreed national strategy.
4. The roles and functions of **tripartite structures** at the national level might rethought in terms of a more precise formulation of the role of every party to suit one common denominator: the discussion of vocational training strategy and development issues. In addition, it is recommended at central level to widen the tripartite structures horizontally by setting up sectoral branch committees in those countries, where this has not happened, yet. This is needed for a more thorough analysis of labour market requirements with a view to better inform the curriculum development process. At the regional level, which represents a very important level for Vocational Training planning, tripartite structures, following perhaps the example of the Regional vocational training Councils in Slovenia, will have to be set up and developed into well functioning bodies to support the planning and implementation of vocational training at local level. At the local level, tasks, roles and responsibilities of the social partners need to be (re-)defined in a more precise way. In general, it appears necessary to set up permanent secretarial structures in all of the above mentioned bodies.
5. At the school level, social partners may generally be represented on the schools' governing boards, as well as in examination committees, as piloted by some of the schools. **"Local education committees"** with an advisory capacity might be set up on an experimental basis with a view to help schools plan and implement learning processes in a closer interplay with workplace-based training sequences.
6. The time is now right to rationalise and clarify the roles of the key vocational **institutions** and bodies in relation to the responsibilities that must be fulfilled. Roles and responsibilities need to be defined and distributed, as well as communication structures set up and co-ordination improved among them.

Overall, the institutional infrastructure to support a modern vocational training system should cover the following areas: research, standards development, curriculum development and review, quality assurance, assessment and certification, teacher support and teacher and management development.

The pre-accession perspective of candidate countries in central and eastern Europe urges the strengthening of the network of institutions at national, regional and local levels. This way, the vocational training system will be sufficiently prepared to make full use of the structural fund-type opportunities, which will be made available starting from the year 2000.

4.9 *Dissemination*

Activities to disseminate results varied from just a few, such as the production of information leaflets and brochures in the absence of the necessary policy support and legal framework in Bulgaria, to an indeed nation-wide, multi-faceted dissemination programme, as carried out in Lithuania.

Summary assessment

Although methodologies developed at a pilot school level have in principle been turned from an experimental to a systemic process, it is very difficult to see how this is to be achieved without a considerable amount of money being allocated for the purpose of mainstreaming. The challenge concerns both equipment upgrading and the training of teachers and school managers - in short, material as well as human resources. The change agents appointed are actors in the country who do not have the resources for this task. Some of those who were directly involved in creating and implementing the projects are now no longer holding the same positions. However, in particular teacher trainers would have to play a crucial role in training the staff of the remaining 90% of vocational schools. The necessary critical mass of change agents is not yet in place and funds are missing to consolidate the efforts.

Good practice

"Good practice" model –
Dissemination of results in Lithuania

The Phare VET Reform programme in Lithuania adopted a systematic and comprehensive approach to the dissemination of programme results using a range of strategies.

One strategy was the "national partnership scheme". The PMU and the Resource Centre managed the partnership of Phare schools with non-Phare schools in order to disseminate the experience of the programme in curriculum and learning materials development. It was also part of a systematic plan to encourage networking. The scheme was in six stages: four training events followed by two visits of non-Phare schools to their Phare counterparts. Altogether the scheme involved over 70 non-Phare schools and these schools continue to use the services of the National Resource Centre. Some became pilot schools in the 1997 Phare programme.

Another strategy was the training cascade. Two lead trainers were developed in each of the six areas: curriculum development; learning materials development; teaching and learning strategies; quality assurance; assessment and management and leadership. Teams undertook trainer training in Poland and Lithuania and, assisted by EU experts, developed training packs and manuals, which they subsequently piloted. Following amendments to the packs, the trainers began to cascade their skills in pilot and non-pilot schools through the country in September 1998. In October 1998, a new team of disseminators undertook training and will add to the dissemination resource as activity continues in the 1997 Phare programme.

Another facet of the dissemination strategy was the setting up of 12 teachers associations in both specialist and general interest groups. In addition, a glossary of terms commonly used in modern vocational education and training systems has been developed to assist Phare and non-Phare schools to maximise the results of training and dissemination.

A quality newsletter called "Reforming steps" has been produced regularly and distributed widely in Lithuania and abroad to publicise the programme. The programme has also featured regularly on TV, radio and in the press. A final conference was organised (one of several throughout the programme) to publicise the achievements of the Phare programme to a national and international audience. For the final conference, a brochure summarising the objectives and achievements of the Phare programme was produced.

Dissemination events have not only been supported by the Phare programme. The Ministry of Education and Science has also commissioned and paid for the dissemination events led by the trainers trained through the Phare programme. This shows a recognition by the Ministry of the skills and ideas generated through the 1994 Phare programme and their potential for application in the wider system.

Five of the disseminators have been chosen along with the five university specialists to make up the Lithuanian team responsible for developing the new modular initial training course for vocational teachers. This shows how much the mainstream vocational training system values the skills in teaching and learning methodologies, training and project management that they gained through the programme. However, it should be recognised that the disseminators need further training themselves if they are to play a part in vocational teacher training in the longer term.

Recommendations

The following is recommended:

1. It is necessary that National Governments provide funding for the mainstreaming process, the scales of which are very big. The countries alone may not be able to undertake such a major exercise. Schools would have to rely on additionally generated income. That is why also funding from the EU or other foreign donors may contribute to this process.
2. Actors trained under the Phare VET Reform programmes may be systematically used to cascade training to other actors in the system.

5. Pilot school approach

Vocational education and training reforms were kick-started through a pilot school approach, empowering staff at national and local level to develop new curricula and methodologies of work. This approach reflects both the change of mentality and the democratic nature of reforms in Central Europe. It is sound in that reforms are 'owned' by the very people who have to deliver them. The pilot schools themselves benefited a lot from their participation in the programme both in terms of their increased motivation for change and innovative methods of work introduced.

One weakness of this approach was the partial lack of guidance from the central level. This was true especially in the starting phase of reforms, when overall education and training reform policies were still absent, support institutions did not exist or were unclear about their role, when neither a revised curriculum development model nor new industry-based qualification standards had been agreed at national level, etc. Schools acted frequently on their own to develop new vocational education models. In some instances pilot schools were allowed to use the external funding sources and operate on an "experimental basis" without any major commitment of policy makers to use results and integrate them into mainstream developments. This was true, for instance, for the 1994 Phare VET Reform programme in the Slovak Republic.

Bilateral donors supported, through technical know-how, different curriculum models which in a few cases took little account of the prevailing needs or scope for replication in other schools.

Another weakness of the pilot school approach may, in addition, be the fact that pilot schools are likely to become elitist and isolated from mainstream education and training provision in the country. This happens especially, if national authorities and support institutions do not accept and back up reform initiatives – legally, but also financially – and disseminate reform outputs to the neighbouring regions and over the whole of the country.

In conclusion, reform efforts were especially successful in those countries where both the national, regional and local levels had jointly worked to common targets in a complementary top-down and bottom-up approach.

6. Conclusions and recommendations

In order to draw firm conclusions and come up with recommendations as to the "right" logic and methodologies of interventions, the analysis needs to look at the wider vocational training reform context in central and eastern European countries, thus going beyond the original scope of the Phare VET Reform programmes 1993-1998.

Transition: modernisation, structural change and systemic reform (WHY?)

With the transition from a centrally planned economy towards a market-oriented socio-economic system countries in central and eastern Europe have been faced with the need to simultaneously introduce into their education system, with shrinking education budgets, three fundamentally different, but very much interrelated, types of reform:

- Modernisation of education content, delivery and assessment;
- Changes in the structure of the school system;
- Systemic reforms to bring education in line with new requirements of a market economy.

The **modernisation of curricula, teaching and assessment methods**, especially in vocational education and training, was necessary to bring existing curricula in line with the changed skill requirements on the part of employers. This review of curricula has progressed relatively slowly, mainly because the necessary human and material resources had often not been in place. Progress was fastest as regards the introduction of new computer technology and foreign languages, but slowest as regards non-knowledge based social skills and key competencies (problem solving, team-work, learning how-to-learn). The modernisation of teaching approaches was even slower, basically because countries failed to introduce substantial changes into their teacher training systems.

Changes *in the structure of schools* have been of a different nature and only in some cases the result of overall education policy reform concepts.

- In most countries structural changes have occurred as a result of re-balancing the relative weight of vocational and general education. This has either been done "on purpose" where education ministers have opened up secondary general education to increase numbers of university students, or – very often – simply by young people themselves who have made use of their new freedom of educational choice and opted for those schools opening up the path to university studies.
- In some countries this has meant a "spontaneous" radical shift from vocational to general education (Poland); in other countries (Czech Republic) students have chosen for secondary technical as opposed to basic vocational schools. In all countries however, a conscious policy to develop high-quality basic vocational schools has not been a high priority.

- Several countries have introduced better connections between the education system and the labour market by (re-)introducing forms of apprenticeship for selected occupations (Hungary, Poland, Slovenia), short post-secondary vocational education programmes for graduates of secondary general schools (Slovenia), or higher vocational education at university level (Estonia, Hungary, Latvia, Lithuania, Slovenia).

- Only a few countries have introduced fundamental overall changes to their educational structures. Hungary and more recently Poland have done so aiming basically at postponing vocational specialisation until after compulsory education. Most countries, however, have been reluctant in this respect, both for reasons of a lack of both capacity and resources and because of concerns about the possible negative impact of a complete structural overhaul.

- Very few countries (Hungary and Slovenia are exceptional cases here) have made the attainment of recognised qualifications independent of the attendance of education programmes within the formal school system, at least for adults beyond the compulsory schooling age.

Countries in central and eastern Europe have restructured their secondary education following pressure by students for better opportunities to enter higher education, either of a traditional academic kind, or of a more applied vocational nature. Increasingly, they also had to cater for students who want to change their educational paths, have left school prematurely, or who wish to return to achieve a higher recognised qualification. Restructuring has also been a response to the (expected) need on the labour market for higher numbers of middle-level qualifications. Restructuring therefore has meant basically:

- increasing internal flexibility by allowing transfers, both horizontally and vertically;
- integrating or better aligning various parts of the education system through bridging courses;
- changing the dead-end nature of especially lower/basic vocational schools;
- delaying extensive specialisation; and
- providing full secondary education levels to a majority of the age cohort.

Systemic reforms to bring education in line with new requirements of the market economy imply changes in contents, delivery, structure and above all in the 'logic' of the relationship between education and employment. Direct and mutual dependencies between schools and enterprises have made way for indirect relations mediated by the labour market. Schools, and the vocational education and training sector as a whole, have had to come to grips with a situation where clear and binding guidelines as to the number of specific qualifications to be "produced" have disappeared and been replaced with considerable uncertainty as to what and how many have to be produced by schools. New types and channels of communication between schools and the employment system have only gradually developed, at school, local, sector and national level. The main feature of this communication is the joint involvement of education representatives and social partners, i.e. representatives of employers and employees organisations.

Curriculum modernisation, types of schools and policy-making (WHAT?)

It is not an easy exercise to describe in a few lines what precisely the experience of central and eastern European countries is with respect to curriculum modernisation, types of school, including the integration of basic and secondary vocational schools, etc. There is as yet no comprehensive comparative analysis that has looked at structural changes across the board.

- One reason for that is that, under Phare, programmes have been restricted to education sub-sectors (either vocational education or higher education) and not to education systems as a whole. Involvement has, thus, been only with parts of the systems.

- A second reason is that Phare assistance to the vocational training sector has concentrated on curriculum modernisation (plus development of teaching materials, provision of equipment and some retraining of teachers) and has largely refrained from structural changes, except for attempts to develop post-secondary and higher vocational education programmes.

- Thirdly, without exception, all Phare programmes have applied a pilot school approach in a few selected schools, leaving up to the national authorities the wider dissemination or translation into national policy after the termination of external assistance programmes. As we have seen, the systemic impact has been rather poor, either because of insufficient national resources to carry the modernisation forward, or because the political will has been absent to do so.

While in most countries curriculum modernisation has, with EU support, been used as a kind of lever to introduce other - and more substantial - changes of a structural and systemic nature (with a limited impact by definition because of the pilot school approach), some countries have used also other instruments to stimulate schools to change behaviour.

- For example, the Czech Republic has used per capita funding to schools as a driver for change. However, evaluations indicated that, as the Czech authorities did not give clear qualitative guidelines, schools responded largely by providing programmes that appealed to students but that did not necessarily reflect demand from the labour market.

- In Hungary, education authorities have tried to use the instrument of decentralisation (local authorities took over responsibility for schools), which in an early phase resulted in a great variety as regards the quality of educational programmes.

- In some countries, such as in the Czech Republic and Poland, it was thought that private schools would make a difference. However, it turned out that private schools were established only in sectors that would not need high material investments and, once established, they would not have a great impact on other schools at all.

- In some countries secondary vocational and technical schools were given the opportunity to provide for tertiary level courses. This often resulted in an attempt by such schools to move away from the close relationships with basic vocational schools and to develop in turn ambitions to become higher education institutions themselves, with all related privileges of funding and autonomy.

These examples, despite being anecdotal, serve to illustrate the overall trend that only in a few cases well designed, overall educational reforms have so far been initiated, based on a clear reform strategy and aiming to restructure the education system as a whole. Interesting exceptions to this rule are Hungary and Slovenia, both countries where serious thinking about educational reforms had started prior to the transition period. Hungary financed its reform from World Bank loans, Phare and its own budget. Slovenia took a more evolutionary approach and has implemented only those elements of the reform for which it could provide the resources, both human and financial. In most countries structural changes have come about as a result of curricular changes.

However, after the first waves of reform initiatives, educational authorities in central and eastern European countries have become more realistic as to what should be done and what can be done. Three key concepts are increasingly playing a central role:

- **Relevancy** - for students and the labour market;

- **Efficiency** - to account for decreasing national budgets;
- **Equity** - with a view to widen access to educational opportunities.

These main policy orientations increasingly lead to a review of existing structures of provision, including issues related to both the quality and structure of schools and programmes.

From pilot schools to structural and systemic changes (HOW?)

As we have seen in Chapter 5, a strategy to experiment with changes on a limited scale, such as through pilot schools, has obviously many advantages. However, if not designed, consciously and from the very beginning, as part of a strategy to develop and implement policy on a wider scale, pilot schools run the risk of becoming isolated, or even worse, of turning into the very opposite of what they were intended to be.

Also, several recent papers from the Foundation or other EU experts who have been involved in the implementation of vocational training reforms in rapidly developing countries, question and challenge the approach by which different "national solutions" have been introduced by experts from different donor or consultancy organisations. "EU Member States represent all the major methodologies of vocational training development. The implementation of European programmes, such as Phare, as well as the bilateral co-operation projects between the individual EU Member States have led to the beneficiary countries being confronted with a plethora of what were often different, frequently incompatible, even competing concepts, models and approaches to vocational training. ... Co-ordination work has not been undertaken. ... This has led, in some instances, to confusion and embarrassment with beneficiary countries in their difficult process of vocational training reform. ... This increases, on the one hand, the range of alternatives and ensures greater plurality, but brings with it on the other hand the risk of fragmentation and a lack of direction."[7]

Parkes (1995) points to the specificity of each country context and the adverse effects that an unreflected transfer of methodologies may have on the countries. "Examining the structural needs of a system under almost complete reconstruction illustrates ... the key features that would seem to be required in any vocational training system .... These ingredients are very simple to describe but a particular working system has a structural, historical and cultural specificity very difficult to transfer. Consequently policy-led initiatives, which require a comparative or transnational approach as one of their ingredients, have to be more than careful not to transfer (unsuccessful) policy measures from one country to another."[8]

Hence, there were many concepts and terms which had not been sufficiently clarified in Central and East European countries prior to the start of reforms.

Apart from potentially causing confusion, Schmidt/Mansfield/Buck/Schröder (2000) also referred to problems of sustainability which some of the approaches developed by foreign consultants have created. "Many of the Western methods have been developed within well-funded vocational training systems and depend, for instance, on high value curriculum materials and training resources. When the funding source is withdrawn, the beneficiary countries may be left with an expensive infrastructure, which they cannot afford to maintain or sustain."[9]

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7 Schmidt, H., Mansfield, B., Buck, B., Schröder, T. (2000): "European Methodology of Vocational Education and Training Standard Development", draft discussion paper, 24.2.2000.

8 Parkes, D. (1995): A Portfolio Approach to Comparative Intervention in the Reform of Vocational Education and Training, in: European Journal of Education, vol. 30, n° 3.

9 see footnote 7.

Key lessons

1. *Clarification of concepts and designing genuine policy and institutional frameworks*

Countries need time and resources to be exposed and reflect upon different vocational training methodologies applied elsewhere and adapt them to their own local contexts. Given that the amount of resources realistically available in central and eastern European countries are much lower than those in Western Europe, priority might be given to efficient procedures for vocational training development which should be underpinned by the necessary competence and affordable infrastructure. In summary, **any approach which is introduced should be capable of being continuously developed and implemented within the country without the need for continued input by experts, materials and equipment.**

2. *Empowering local actors and applying partnership approaches to project implementation*

The first round of Phare VET Reform programmes has demonstrated that there is both will and capacity in central and eastern European countries to start or continue the development work and an understanding of the benefit it brings to individuals, the institutions and the country as a whole. A gradual move towards increasing the involvement of local counterparts is recommended. **Incentives for change shall be given and local actors enabled to develop solutions that work in the given country context and culture.**

As experience with the implementation of European Social Fund projects in EU Member States has shown, there is an increased added value in terms of effectivity and sustainability, if local or regional partnerships are established. They should build on a consensus among the regional, economic and social actors on the human resources component and involve them in project implementation. The encouragement of a culture of participation in vocational training development work among all the key partners will have both long term benefits for the countries and facilitate the crossing of the traditional strong divides between the world of education and the world of work.

The role of (paid) consultants may be increasingly one of facilitating and guiding learning processes of local partners so as to make sure that expertise is developed and stays within the country.

3. *Vocational education and training reform as a combined learning and strategic development process*

Grootings (1998) argues that the reform of vocational training systems is "more than a single act establishing the legal framework. A change in the 'logic' of the system", he writes, "can only be achieved gradually by the vocational training actors themselves. Since there are many people involved, a tremendous learning process is required which needs to be facilitated and intensified through adequate interventions and guidance. When coping with uncertainty, it is unwise to set all hopes on a grand design and a quick reform.

It seems particularly important, after a long period of central regulation and bureaucratic administration, to depart from a traditional 'top-down' conception of vocational training reform. Instead, the principle would be to improve and promote self-responsibility and self-initiative on the part of the local actors. But such 'bottom-up' strategies, which give the initiative for educational change to the individual schools, may easily lead to fragmentation and competition between schools.

It is necessary now to integrate more consistently the various changes introduced so far to become part of a more coherent change strategy. From a strategic point of view, central and eastern European countries should reflect once again on the interrelationship between the various aspects and levels of reform. They should ask the fundamental question where one should start in order to trigger off a development process that will lead to the desired outcomes. A fundamental discussion about the role of the vocational teacher and trainer may now well be of a more strategic value than the curricular reform approach that has dominated vocational education and training reform so far."[10]

Interventions are required at a "higher" level within the system – at the level of methodology and process. The putting in place of the necessary **strategic framework and building blocks in terms of mechanisms and institutions, as well as a critical mass of trained actors** appear to be the essential prerequisites to ensure sustainability and continuation of systemic reforms.[11]

4. *Implementing key principles in education and training*

Comparative policy analysis in education shows that there is no "one best way" to organise education systems. However, modern education systems have, despite the continuing differences, increasingly developed and implemented a wide body of agreed educational 'good practice' and quality standards in terms of contents and structuring of education. National educational policy-makers from EU Member States have even agreed at their Lisbon Summit in March 2000 to introduce a system of "open policy co-ordination", keeping each other informed about basic policy initiatives and about progress and results of their implementation.

Key characteristics include:

- the structured involvement of social partners in decision-making;
- the integration of work and learning;
- the adjustment of education and training programmes to learners needs;
- the establishment of structures to facilitate the transition from school to work;
- the postponement of career choices to a later age;
- the de-specialisation of education and training programmes;
- increased possibilities to switch horizontally between educational paths and to progress vertically along the educational path;
- an increased autonomy and innovative capacity at school level;
- a shift from input to output control mechanisms; as well as,
- the development of continuing vocational education by giving various incentives to encourage the investment in training by both employers and individuals.

Most recently countries have also invested in:

- the integration of formal and informal learning;
- the development of national transparent qualification structures; and
- even more radically, the development of lifelong learning systems allowing to go back and forth between or combine education, training and work during the whole life period of an individual.

10 Grootings, P. (1998): An independent review of recent developments, Tallinn.

11 Cf. also Parkes, D., Grootings, P., Gronwald, D., Nielsen, S. (1999): A Cross Country Analysis of Curricular Reform in Vocational Education and Training in Central and Eastern Europe, European Training Foundation publication.

Furthermore, it is widely recognised that modern production concepts and forms of work organisation require broadly skilled and highly competent workers who are able to take initiatives and act in a self-guided way. Translated into an educational discourse, this means that effective learning processes require a combination of self-organised problem formulation, planning, execution and evaluation of tasks carried out by the student, as well as a continuous self-reflection about and a re-arrangement of his or her own learning activities. The "modern approach" to education and training implies a broad and comprehensive occupational preparation, where, besides technical skills, emphasis is put on the development of key competencies. They require both a well-balanced mix of theoretical and practical learning and a departure from a subject-based approach to curricula. The "modern approach" suggests an orientation of vocational training towards clearly defined and agreed professional or occupational profiles, which are however by no means static.

To accelerate reforms, education and training professionals are to accept responsibility for the 'employability' of young and adult learners, while employers and trade unions are to accept responsibility for vocational training to make themselves competitive in a global economy. To facilitate this process, stronger mechanisms and incentives have to be put in place in all central and eastern European countries.

The extent to which these key principles are followed may also form the basis for a positioning of the countries' vocational education and training systems on an international scale.

5. *Embedding vocational education and training policies within a lifelong learning context*

Lifelong learning strategies, as called for today, imply that vocational training and, hence, reforms can no longer stop at the end of secondary education or at a particular age. The challenge is to make secondary education and training an integral part of lifelong learning.

Yet it is worth noting that "an approach to lifelong learning based largely on a linear extension of current supply-oriented policy initiatives will almost certainly prove inadequate. Instead, current assumptions regarding demand-based learning and differentiated sectoral policy developments will need to be replaced by those that reflect the belief that learning needs to be responsive, recurrent, well integrated and lifelong. If this belief is to be translated into practice, sectoral jurisdictions and boundaries will have to be successfully bridged, and individual reform initiatives brought together to ensure that they are both mutually reinforcing and complementary. In brief, what is required is the development of a comprehensive, coherent and co-ordinated vision of the country's lifelong learning needs, and the identification of demand-oriented, flexible, cross-cutting and mutually supportive public policies to meet them."[12] Future EU-funded vocational training reform programmes may hence, encourage a cross-departmental and cross-sectoral approach to education and training policy making.

With a view to developing vocational education and training systems within a lifelong learning perspective, it is recommended that:

- "a high-level, cross-sectoral task force be given responsibility for the preparation of a comprehensive policy report on lifelong learning, identifying needs and assigning roles to different players;
- priority be given in curricula, teaching methods and teacher training and re-training to developing core skills and competencies, such as the ability to think independently, solve problems, be innovative, take initiatives, work in teams and learn how to learn;

12 OECD (1999): Towards Lifelong Learning in Hungary.

- the links between learning and work be strengthened at all levels of the education and training system in order to provide a more balanced mix between the acquisition of theoretical knowledge and practical skills;
- teachers be trained in the use of the information and communication technologies and learner-centred approaches more generally. In addition, the teaching function requires not only instructional skills but skills in tutoring, learning facilitation and evaluation, as well;"[13]
- new pathways to learning and new contacts and linkages between once-isolated institutions and systems be developed. The goal must be to strengthen and expand these pathways, make them available to adults as well as young people and find ways of easing the transition between education and the world of work;
- new avenues be opened for developing, validating and recognising competencies acquired both within and outside formal education and training schemes;
- apprenticeship or work-based training schemes be developed alongside traditional school-based schemes;
- unemployed young people are (re-)integrated into the world of work by way of tailor-made education and training pathways;
- workers be encouraged to invest in their own aptitudes and skills; and,
- companies be encouraged to invest in human resources development.

13 Ibid.

Annexes

Annex 1: Main outcomes and findings from the 1994 Phare VET Reform programme in Estonia (ES9409)

Systemic and policy impact

Transforming the Estonian vocational education and training system was not an explicit aim of the programme, but the results and the inputs into the national vocational training policy debate and general vocational training reform have been quite substantial. Much of the progress in vocational education reform has been achieved in the area of modernisation of curricula, which in Estonia has been the main vehicle of reform. The spin-off of the pilot school approach has been remarkable in terms of both institution building and to some extent national policy making. However, most of the new institutions and developments built up during the Phare VET Reform process are still very recent, and an important task for the near future will be to strengthen and consolidate them.

Overall, the Phare programme managed to initiate a learning process among teachers, policy-makers and social partners, build up strategic policy-making capacities, develop institutions for social partnership, draft a Vocational Training Concept paper and a series of legal documents and start a public debate about the overall education system. The process of change commenced primarily at two levels:

1. modernisation of the vocational training system through updating the content and delivery systems to international standards and as required by the labour market;
2. introducing and proposing structural changes within the decision-making mechanisms of the education system. Within Estonia, the main priorities under this level included the development of a national framework of vocational qualifications, financing of the national vocational training provision and the articulation from one type of education/ level to another.

Outcomes and outputs

- Modular based curricula with test specifications for new courses (2 and 3 year cycle) using a standard have been developed and are being implemented in all 13 pilot schools. An additional 24 vocational schools were drawn into the project, once the methodologies and other pilot initiatives had been tested and evaluated.
- The 13 occupational families/sectors represented through the pilot school projects were: agriculture, land surveying, health care/dental technician, catering/hospitality/tourism, forestry, telecommunications, construction, chemical/food processing, media/graphics and engineering.
- The basis of each new course is now built upon a detailed occupation profile which reflects enterprises' perception of the competencies required by an experienced worker within that

occupational family. This occupational profile methodology adopted by each pilot school was linked directly to the outputs from another national pilot initiative which also formed part of this component, between the Foundation, employers organisations and the Estonian Chamber of Commerce and Trade.

- The methodology for developing **modular descriptors for certification purposes** was piloted and implemented for all new courses. These descriptors were prepared for each course module. 130 of them were, at the end of the programme, awaiting accreditation and approval by the Estonian Centre for Examinations and Qualifications.
- **13 course designers** were trained on curriculum design systems and methodologies; designing test specifications, assessment and certification systems, accreditation, evaluation techniques, developing education and competence-based standards and the design of equipment specifications.
- These fully trained course designers are now able to assist with (a) the development of further job families within the context of a modular, standard-based curricular system and (b) the development of other course designers in the satellite school system.
- All pilot schools have received equipment which is being fully utilised in the delivery of new courses.
- **Professional Councils** have been established and have adopted the methodology piloted under this component to develop sectoral job profiles.
- Through the outputs of this component there is now a direct **link established between industry needs and national education provision** which should enhance both the relevance and job prospects for students completing these modular based courses.
- The Ministry of Education are committed to the further development of the modular based curricula approach into other job families.
- There is now a **transparency dimension** to the new courses which will enhance the overall national and international mutual recognition of their standards once a fully developed national framework of vocational qualifications is in place.
- By the end of the **school manager programme**, each school had developed (a) a strategic plan for the school, (b) an operational plan and (c) a marketing plan.
- Links were established between Estonian and EU schools and **partnership agreements** signed in 9 cases.
- 2 schools were working to achieve the ISO 9002 **quality mark**.

Findings

- Prior to the start of curricular reforms, both curriculum guidelines and a valid **curriculum design model** were approved at national level which involves the undertaking of surveys of industry to determine scope and standards for the occupational profile.
- The Phare Programme has managed to achieve a change in the **logic of the system** by developing a new thinking and appropriate mechanisms (e.g. tripartite Professional Councils) in order to align vocational training with the emerging needs within the labour market.

- Most work has concentrated on developing modules for modern school curricula. However, the establishment of the required **support structure** for a fully operational competence-based modular system (credible research base, central resource centre, examination and award bodies, etc.) would need to receive more attention now. Developing the capacities of the National Centre for Examinations and Qualifications is crucial in this respect.
- Estonian education law provides for a fixed set of general subjects to be taught apart from the vocational subjects. These general subjects are the same like those taught in "gymnasia".
- The **training of vocational teachers** under the programme has not affected the Estonian pre- and in-service teacher training systems as such. The latter remain fragmented and over-academic. In order to create a critical mass of well trained teachers, the training of vocational school teachers would have to be institutionalised and scales enhanced. The latter applies also to the training of school managers.
- The **ISO 9000** series may be considered a costly investment and perhaps not the right approach to quality assurance in pedagogical institutions.
- Systemic development is still badly supported by professional and policy-oriented **research**.
- National funds are lacking for a continuous **investment** in the sector, while on the other hand the network of schools has still not been adjusted to the new developments and, thus, continues to produce graduates with bleak labour market prospects.

Recommendations

- A coherent **national training policy** has to be defined, comprising both initial and adult vocational education and training but also with a view to preparing European Social Fund actions in Estonia.
- The development of a technical and administrative framework for **assessment and certification** is needed and would help establish credibility of the reformed system with all the intended users in Estonia. A start has been made with the establishment of the National Centre for Examination and Qualification but much still needs to be done in this field.
- A national institution which has the responsibility of organising the design of new and updating of existing **curricula** is needed to sustain the achievements and to transcend the pilot period curricula production.
- Support is needed for the development of **regional training centres** which aim to provide wide access to initial and continuing vocational education and training.
- Support is needed for the further development of the national vocational training programmes for secondary vocational education and **higher vocational education** provision in close co-operation with the social partners and in the framework of the national qualification system.
- Support is needed for the **EU integration** process by preparing the various key actors at national, regional and local levels (administration, social partners, training institutions) for participation in EU programmes, including the Structural Funds.

Annex 2: Main outcomes and findings from the 1994 Phare VET Reform programme in Latvia (LE9408)

Systemic and policy impact

The Latvian Ministry of Education and Science has taken over ownership of the reform. There has been a lot of progress in the area of developing a strategic and legal framework for vocational training which includes a ministerial regulation stipulating requirements for curriculum development and the draft vocational training law. However, tangible results were available only towards the end of the programme.

Overall, the Phare VET Reform programme has influenced the way of thinking in Latvian vocational schools. It has led to both ongoing work to develop curricula and study materials in schools, the review of traditional teaching methodologies and the strengthening of research capacities in vocational training. The fact that some of the trained teachers act as trainers for others can also be considered a success.

Outcomes and outputs

- Curriculum development for **10 vocational profiles** (incl. general hospitality, rural tourism, forestry, food processing, agribusiness, interior and exterior construction works, sanitation and plumbing, car mechanics, nurse education and social care) formed the core of the reform of secondary vocational education and training in Latvia.
- In addition, curricula were developed for **5 general subjects**, i.e. English language, applied informatics, small business development, environmental protection and communication skills. Curricula for general subjects have been adopted by the Ministry and are presently being adopted in all vocational schools in Latvia.
- In contrast to the originally planned 20–25 schools, due to great interest **37 schools** were selected to participate in the programme altogether. While representatives from all schools were fully involved in the curriculum design process, only **18 pilot schools** could also benefit from the equipment procurement component of the programme. However, six of the satellite schools dropped out during the process, as they felt they would not benefit enough from the programme.
- A two-year training programme was arranged for both **curriculum authors and teachers**, as well as staff from the Ministry's Centres for Professional Education (CPE) in the areas of curriculum development, teaching methodologies, preparation of teaching material, assessment and testing, as well as examination and certification. The programme included seminars, workshops, study tours and technical assistance.
- A training programme for **school managers** was implemented through the simultaneously ongoing Phare Business Education Reform programme in Latvia. The atmosphere in many of the pilot schools was evaluated to be supportive to reform. However, this would not hold true for all vocational schools.
- **The equipment and teaching materials** have improved in all pilot schools.
- **The EU partnership programme** was only partially successful. One school managed to send their students on training assignments to Germany. Regular staff exchanges and correspondence have been arranged between some other Latvian and EU schools. However, some Latvian institutions did not manage to set up a partnership at all.

- Study tours, seminars and workshops were organised for PMU staff, senior policy-makers, CPE staff and social partner representatives in order to stimulate the dialogue on vocational education and training policy issues.

Findings

- The selection of occupational profiles at the start of the programme was done on the basis of "guesses" or wishes expressed by participating sector ministries rather than a sound assessment of actual labour market needs. Thus, job prospects of graduates from two of the newly established vocational programmes – **social care and rural tourism** – are bleak if not non-existent.
- On the other hand, traditional industrial occupations or **newly emerging occupations** required by the market economy, such as in the field of economics and trade, were not covered at all. Also in the health sector Latvia is lagging behind other countries.
- In addition, the **most problematic areas** in east and southeast Latvia, which are facing industrial decline and high unemployment rates, were weakly represented in the programme.
- The availability of Phare and national funding for only some pilot schools and the Ministry's intention to close down schools have led to some **competition** between schools in Latvia with some of them not being willing to share knowledge and/or resources with others.
- A curriculum design, testing and review process normally requires a considerable amount of research resources and takes a couple of years. In the Latvian case, there was confidence that **teachers and a few experts from industry** alone would be capable of renewing the occupational profiles and curricula within a couple of months. Teachers felt that they were lacking assistance after the completion of the training programme. **Capacities of existing support institutions** were developed after rather than prior to the start of the curriculum design process.
- The first 4-year cycle of curricula has not been finalised yet. In addition, draft curricula would need **ongoing revision**. Also, there is a lack of appropriate teaching and learning materials.
- All secondary school students in Latvia are expected to complete general secondary education. This means that altogether 7 general subjects, which include the above mentioned plus Latvian language and mathematics, have to be taught on top of the ordinary vocation-oriented programme. This results in a **heavy academic/theoretical part** of all secondary vocational programmes.
- Alternatively, both the number of years in compulsory basic education might be extended and subjects, such as **communication skills** or environmental protection should be integrated in the ordinary programme rather than "taught" in separate subjects.
- Due to their extremely limited resources, schools might face major problems in servicing and maintaining the **equipment** procured, once the 3-year guarantee period has expired.
- The **partnership programme** with EU schools and institutions was pushed through by the PMU but often lacked the necessary basis for the development of target-oriented, sustainable partnerships. Outputs may thus be considered rather modest.
- **Social partner organisations** at national level have managed to raise their profile. However, rivalry existed between some of the social partner organisations on who is to take on the leading role.
- Interest and commitment from the part of local **employers** to participate in vocational training have remained weak.

Recommendations

Further back-up and support from the highest government levels in Latvia are required without which Phare programme outcomes may be at stake. This implies a clear policy frame and vision about the future structure and mechanisms of the education and training system, as well as the further building of a credible research base in the area of curriculum development.

Annex 3: Main outcomes and findings from the 1994 Phare VET Reform programme in Lithuania (LI9410)

Systemic and policy impact

The programme succeeded in initiating and consolidating valuable co-operation and working relationships between the Ministry of Education and Science and the Ministry of Social Security and Labour. The production of the White Paper for vocational training towards the end of the 1994 Phare programme, which was the result of widespread consultation and participation among all the key vocational training stakeholders, is probably the most significant tangible outcome. Overall, the Phare VET Reform programme was successful in making a significant and positive impact on the wider vocational education and training system in Lithuania and has served as a catalyst for ongoing reform.

Outcomes and outputs

- **27 Lithuanian vocational institutions**, including vocational schools, colleges and adult (labour market) training centres, were selected to become pilot schools under the programme.
- The schools were grouped into **9 job families** covering (a) agriculture, food and wood-processing, (b) electronics, communications and construction and (c) tourism, graphic design and printing, business services, health and social care and transportation.
- The **partnerships with 9 EU schools** and visits to them were a great motivating factor for Lithuanian teachers. The expertise of the EU schools was used to develop the pilot schools in areas of curriculum development, new teaching methodologies, teacher training techniques and management of change. For teachers and managers, the EU partnerships have not only brought immediate benefits in terms of materials and expertise, but they have resulted in lasting links which have flourished into joint projects under the Leonardo and Socrates programmes.
- A series of **training** programmes was held for school management teams and an extensive programme of teacher training workshops was run. In addition, there was training for job family co-ordinators and training in the new equipment. Groups of teachers were trained to write teaching and learning packs to support the new modular curricula. Altogether 300 packs were produced.
- The new **modular approach** piloted through the Phare programme has been recognised by the ministries involved as the way ahead. Around 700 modules were produced through the programme and they have been catalogued according to the job family and codified.

- The involvement of **social partners** at all levels in the vocational training process, from policy development to standard setting and to assessment of vocational training programmes, is recognised.
- The two ministries agreed on both a list of competent organisations to inform the development of occupational standards/ job profiles and a **standard-setting** process in conjunction with social partners. Their active involvement was formalised through the establishment of Industry Lead Bodies (14 altogether).
- The **equipment** procurement process was managed efficiently. Some schools were able to undertake certain activities for the Phare programme to pay for extra equipment.
- In its structured and varied approach to **dissemination** and the evidence that the strategy has been embraced by the mainstream vocational training system via Ministry of Education and Science financing, the programme can be regarded as having not only met but exceeded targets.
- In this context, institutions were set up through the programme which will bring lasting benefit to the wider vocational training system. One example is the **National Resource Centre** that filled the gap that existed at the start of the programme in the development and administration of both curricula and support materials, as well as the provision of in-service teacher training.
- A system for **training curriculum authors** and editors has been introduced which should ensure the ongoing production and quality of curricular support materials in the Lithuanian language.
- Dissemination teams have been trained in 6 key areas and a **"National Partnership scheme"** was set up where Phare pilot schools were partnered with non-Phare schools. The Ministry of Education and Science has also commissioned and paid for the dissemination events.
- Another facet of the dissemination strategy was the setting up of **12 teacher associations** in both specialist and general interest groups.

Findings

- A weakness of the Phare programme was the **lack of clear direction** and close monitoring of the curriculum development process in the first stages of the programme. The focus of the first phase of the 1994 Phare VET Reform programme in Lithuania was on pilot activities rather than policy development.
- The study visits and training organised have exposed the pilot schools and a number of key policy makers to a **variety of EU systems** and approaches which are, however, not comparable to the Lithuanian context. The use of the EU partnership schools to develop curricula, using the different methodologies of their own countries, has led to a situation where many modules have been developed in an uneven fashion, without reference to national standards and without due consideration to the assessment process.
- There was an extremely **tight timescale** set by the programme objectives for introducing the new modular curricular in the pilot schools.
- As a consequence, both the modules and the learning materials developed through the programme will be subject to an **extensive review process** before they can be adopted as the basis of a national system.

Recommendations

- **Policy development** should become a priority and a strategic approach to planning activities needs to be adopted to give guidance and leadership to individuals and institutions within the vocational training system who implement the change.
- The roles and responsibilities of the key national (and regional) bodies should be clarified and rationalised so that an **institutional infrastructure** is in place that can support the reformed vocational training system. In this context, the role of the Methodological Centre for Vocational Training has to be strengthened to develop as an accreditation authority.
- The key ministries must find ways of increasing the **staff and resources** of the National Resource Centre. Access to this resource may be widened by creating small regional centres based in the Regional Education Councils.
- The **curriculum review** process will have to take place against the criteria set out in national standards as these are developed for the 14 main vocational streams in Lithuania.
- The Ministry of Education and Science has to set up national **qualification and certification systems**, examine ways to utilise both education and industry specialists in vocational **examinations** and put in place a **quality assurance** system.

Annex 4: Main outcomes and findings from the 1994 Phare IMPROVE programme in Poland (PL9416)

Systemic and policy impact

The reformed Polish vocational training system now evidently includes many of the components stressed in the Phare IMPROVE programme, such as a trainee-oriented methodology, clearly defined and measurable objectives, flexible/modular curricula, continuous training and core skills. In addition, the Phare IMPROVE teachers and directors could play an important role in the further vocational training reform process.

However, it is very difficult to say to what extent this particular Phare programme has influenced the ongoing reform process, as the new training system has also been influenced by assistance, such as through World Bank projects and others. Overall, the programme has received insufficient back-up and support from the part of the beneficiary institution – the Ministry of National Education. New regulations regarding state-determined "base curricula" for all vocational training programmes have hampered the curriculum design process. Programme activities were considered "experiments" with limited immediate impact on national policy-making.

Outcomes and outputs

- The IMPROVE programme was structured so as to follow-up the work already undertaken in Phare UPET programme and complement the Phare TERM and Phare MOVE Programme by facilitating the diffusion of ideas and experience on EU practice.
- The process initiated under the Phare UPET programme to develop and review curricula for 29 occupations was continued. As an underlying principle, curricula were designed for broader

profiled occupations (at different attainment levels) in 7 vocational areas, including construction, chemistry, textiles, electronics, telecommunications, metal trades and economics.

- The curricula were designed by teams based in four regional training centres in Poland and given a trial in altogether **35 selected vocational institutions** (out of about 1,000 vocational institutions in Poland).
- A large number of teachers directly involved in the trial were trained on the subject matter, as well as active types of learning to deliver the new curricula. Exclusively Polish experts from the National Teacher Training Centre provided training on the latter. Subsequent to two study visits by some teachers to the UK, action plans specifying short and long-term development measures and a plan to cascade **teacher training** were devised and implemented.
- Course-specific **teaching and learning materials**, as well as test specifications were developed.
- One of the most important features of the changed role of teachers was the development of a concept for their **self-assessment** in an objective way.
- New methods for the **assessment of students' performance** were developed and a respective handbook issued.
- Modern learning equipment was supplied to the selected schools. However, at the time of writing the technical evaluation report, i.e. five months after the completion of the Phare IMPROVE programme, some schools were still waiting for the delivery of the equipment.
- A core group consisting of one co-ordinator and 10 experts prepared a **handbook** on the introduction **of core skills** into curricula of elementary and general secondary schools. In addition, 24 teachers were trained and modules developed for introduction within the curricula for mathematics and the Polish language and pilot-tested in two "lycees" (general secondary schools) and four elementary schools.
- The PMU managed to set up an effective **network for communication** with the four regional centres and other institutions involved in the programme.
- 12 well-designed editions of an **IMPROVE bulletin** were issued that aimed at circulating information on the programme on a nation-wide scale. In addition, a number of regional **dissemination** seminars were held during the lifetime of the programme.

Findings

- The **modular curricula** themselves have been well received by all involved school managers, teachers and students. They were deemed to be well structured and logical in their composition.
- Primarily teachers in co-operation with subject area specialists have designed the curricula. There was no involvement of **social partners** in the identification of skill needs and/or the curriculum design process. In a system where the formerly well-established links between vocational schools and local enterprises have largely vanished, new mechanisms have to be put in place to ensure relevance of vocational training provision to industry needs.
- The is still a shortage of accompanying **learning materials**.
- According to the report, no **interlink** was established between vocational curriculum design and teacher training components of the programme and the KREATOR project. Nor were efforts under the latter project co-ordinated with the national NOWA MATURA programme. Students trained with the help of the IMPROVE curricula would have wished to put, for example, a greater emphasis on the development of entrepreneurial skills.

- However, the KREATOR part of the programme was followed up by the Phare 1997 SMART programme (€ 7 million).
- According to the evaluation report, the programme's **Steering Committee** did not play a very active part in programme implementation. In addition, the regional education administrations ("Kuratoria") showed only a modest interest in the programme.
- The programme has suffered from a frequent **staff turnover** in the Ministry of National Education and a lack of both sufficient staff resources and competence in general.
- The Phare programme was also not widely known outside the institutions directly involved.
- On behalf of the Ministry, the final **evaluation** of programme outputs was commissioned to a Polish institution that was not considered highly competent by the programme implementers. However, many of the reform elements have now been taken up again by the 1997 Phare SMART programme.
- Without teachers having a **mandate** to continue the curriculum development process and cascade the successfully tested curriculum and materials design, teacher training and evaluation, as well as students' assessment models, there is a risk of reform efforts remaining isolated or even being at stake. In this context, materials used, for instance, for teacher training could well be incorporated in the regular practice of teacher training institutes. There is also a need for a national resource centre from where schools could draw course materials.

Recommendations

- A coherent **national training policy**, comprising both initial and adult vocational education and training, has to be defined by the multiple stakeholders also with a view to prepare for European Social Fund interventions.
- The development of a national framework for **qualification standards, assessment and certification** is needed.
- Constant revision, further development and updating of vocational **curricula** is strongly recommended in order not to be out of date in a near future. This work should be organised in a tri-partite manner assuring the connection to the economic environment (with representatives from research organisations, the Ministry of National Education and employers' organisations). Expansion into other vocational areas in close collaboration with labour market actor could be recommended, too.
- Vocational training in Poland would benefit from an integration of the experience gained during the Phare IMPROVE programme into the general **teacher training** system. Teacher training institutes could use material developed.
- As the success of many training reform initiatives depends on the availability of **study material** to support the teachers in their day to day work, it is recommended that the development continues and that the material is retrieved and easy accessible from a central co-ordination point.
- Bearing in mind the high cost of updating a high-tech **computer** classroom in relation to the limited resources of many schools it is advisable to let quality prevail over quantity when investing in computer hardware.

Annex 5: Main outcomes and findings from the 1993 Phare VET Reform programme in the Czech Republic (CZ9305)

Systemic and policy impact

In the early stages of transition, the initial training system had responded mainly to immediate demands of students and parents without adequately addressing the long-term requirements of a market economy. The comprehensive set of recommendations resulting from the 1993 Phare VET Reform programme has contributed to the efforts of the more recent past to overcome the predominantly ad hoc approach towards educational reform. The main policy objectives of education and the development of the education system were approved by the Government only in April 1999. These comprise targets related to the development of education opportunities and equal access to education, changes in approach and content of education and structural changes of the education system. In addition, seven fundamental strategic documents were drafted. Drawing on these documents and the public debate thereof, it is intended to complete a National Education Development Programme by the end of 2000. It can be stated, however, that the pace of overall vocational training reform remains slow and the major problems (fragmentation, rather rigid structure limiting student choice of pathways, limited transparency, comparability and quality of outcomes, extension of the school network by relatively small schools due to per capita financing) pertain.

Outcomes and outputs

- A new curriculum development **methodology** was designed by the Research Institute of Technical and Vocational Education (VUOS) and tested by the pilot schools. This two-stage curriculum development model (basic and school curriculum) ensures comparability of programmes as well as sufficient flexibility for schools to respond to regional and local needs.
- The curriculum working groups established in the **19 pilot schools** closely co-operated with VUOS in designing new and more broadly based curricula for altogether **12 clusters**, including agriculture, ceramics, chemistry, civil engineering, economics, electro-technics, glass, hotel and catering, mechanical engineering services, textile and trade.
- Approx. 300 teachers and managers participated in **training** courses on modern school management, new teaching methodologies and foreign language teaching.
- Outputs include **training packages** replicable in future courses for non-pilot school teachers. Participants in training were trained as teacher trainers.
- **Learning materials** were developed to support the delivery of new curricula. These include 25 sets of documents for the vocational part of the curriculum and 5 sets for the generic part, including aesthetics, civic education, environmental studies, introduction to the world of work and key skills.
- In order to secure the link between practice and policy levels, the 19 pilot schools set up a **co-ordination committee** with the participation of the 19 school managers.
- Pilot school teachers assisted the PMU in the drawing up of **equipment** specifications and equipment was procured for all pilot schools.

- **Partnerships** were set up between the pilot schools and schools in EU Member States. Aims included the improvement of school management, as well as the co-operation with social partners to introduce new teaching technologies.
- Towards the end of the programme expert groups were set up to discuss **vocational training policies** with respect to 8 main areas. Reports from the 8 groups were widely discussed and summarised into three synthetic papers. The most important outcomes of this component have been the draft vocational education and training policy paper and recommendations regarding future steps in the transformation process.

Findings

- **Pilot schools** have made a valuable experience with (a) postponing the choice of type of secondary education through introduction of a first common year of education; (b) implementation of a two-level curriculum, (c) key skills, (d) a project-based approach to education, (e) module-based teaching, (e) improving the vertical and horizontal pathways for students, (f) co-operation with social partners, (g) in-service training and (i) co-operation with EU schools.
- The radically decentralised and free curriculum development in the early years of transition as a reaction to the previously centralised approach has resulted in both a **fragmentation** of the vocational training system and lack of transparency. Under these circumstances it is difficult to ensure comparable quality of vocational training in the country. VUOS has played an active role in counterbalancing this development by designing curricula and national standards.
- Most of the recommendations resulting from the Phare VET Reform programme have not yet been transformed into a **long-term strategy** for vocational education and training development.
- An adequate **legal framework** that would enable recommendations to be implemented, e.g. on developing a modular approach in vocational training, still needs to be created.
- Further **challenges** include (a) implementation of the centrally designed basic curricula and development of school curricula responding to regional and local qualification requirements on a broad basis, (b) improving the legal and administrative framework, in particular at regional level, with a view to enhancing systematic social partner involvement in shaping vocational training and (c) the devolution of vocational training responsibilities from the national to the regional level.

Recommendations

For further development of the vocational education and training system it is recommended:

- to increase efforts to create the adequate **legal framework** necessary for implementing the recommendations of the Phare VET Reform programme,
- to accelerate the implementation of basic **curricula** and the development of school curricula with a view to ensuring comparable quality of vocational training provision and outcomes;
- to enhance **social partner** involvement in designing vocational training;
- to strengthen links between vocational training providers and enterprises with a view to better adjust curriculum development more closely to labour market needs in particular at local and regional level, thus increasing the **responsiveness** of the vocational education and training system and enhancing employability.

Annex 6: Main outcomes and findings from the 1994 Phare VET Reform programme in the Slovak Republic (SK9403)

Systemic and policy impact

The sustained impact at the system/policy levels of the programme activities has so far remained limited. In the absence of a clear strategic management from the national level, the programme relied very much on individual initiatives. No vocational training reform strategy has been developed nor a legal basis laid for the integration of pilot school results into the national vocational training system. There have been indications by the government elected in 1998 to address this deficit which remains, however, still to be materialised.

Outcomes and outputs

- Committed **teachers** and school managers have been given the possibility to develop relevant, locally adapted curricula.
- The State Institute for Vocational Education (SIOV) developed **curriculum guidelines** based on the learning outcomes rather than teacher input, learner-centred methodologies, appropriate assessment mechanisms, and a modular system allowing for a broad-based foundation training with progressive specialisation (allowing for more local input).
- Curricula were developed for the following **sectors**: mechanical engineering, textiles, food processing, gardening, electrical engineering, construction, economy/commercial service and transport.
- While curricula have been developed for years 1 to 4 of the vocational training programmes at all pilot schools, pilot schools have returned to the use of old curricula for years 1 and 2 due to the **lack of support** by the Ministry as regards the future use of the new curricula beyond the time span of the programme.
- **Teacher training** was handled by SIOV and the National Working Group on Teacher Training in co-operation with foreign consultants in an effective manner. Teachers were reported to never revert to old patterns of teaching. However, the training was delivered too late to have an impact on the curriculum design process and was not based on a training needs assessment. Existing regional teacher training centres were not involved in the exercise.
- All pilot schools were equipped with both computer hardware and software and new workshop **equipment**. This equipment was not always adapted to the new curriculum requirements. On the other hand its maintenance will present a major challenge.
- **EU study visits/** partnerships were evaluated to have made a positive contribution to the success of the other components of the programme. However, their lasting effect is questionable mainly due to a poor planning of this activity, the selection of EU partner schools at random and a lack of language skills of participating Steering Committee members, policy-makers, vocational training experts and teachers.
- **Besides** some limited cases of co-operation at local level, **social partners** have not shown a great interest in programme implementation.
- **Dissemination** activities were limited to publications and a final conference.

Findings

- Programme **implementation** was practically condensed to one year due to difficulties arising from the political environment, poor commitment and management capacities at national level, frequent changes of actors and institutions involved and disputes over implementation arrangements.
- The programme provided actors at the grassroots level with the opportunity to keep abreast with (EU) trends in developing modern vocational education and training systems. However, due the **poor support** by the Ministry of Education during and after the programme, results remained largely limited to the pilot school level or were even put at stake.
- The excellent **curricula** developed are used by pilot classes only. No provisions exist to transfer them to other classes or schools.
- At the time of the evaluation, some of the pilot schools had already discontinued to open new classes for the not centrally endorsed **pilot vocational training programmes**. In addition, the issue of a recognised certificate for graduates from new programmes had not been solved.
- Achievements made under the **teacher training** component have not been integrated in national practice.
- Both **EU partnerships** and **equipment procurement** are currently not continued for financial reasons.
- **Dissemination** activities, as far as they have been implemented, have not led to a permanent mechanism for the circulation and exchange of information.

Recommendations

- The necessary legislative, financial and institutional measures have to be taken for **integrating programme results** into the mainstream vocational education and training system in Slovakia. This includes the approval and dissemination of new curricula and individual modules, a consolidation of new assessment and accreditation procedures, the maintenance of equipment, the development the pilot schools into regional knowledge and development centres, the development of a nationwide teacher training programme, etc.
- Development of a **responsive vocational training system**, including the broadening of the general education component, acquisition of key skills, delay of specialisation, revision of both occupational fields and profiles in close co-operation with the social partners.
- Improving the collaboration and active **involvement of all actors** relevant for the vocational education and training sector.

Annex 7: Main outcomes and findings from the 1994 Phare VET Reform programme in Romania (RO9405)

Systemic and policy impact

The country has taken substantial steps towards modernising training content. Institutions have been established to support vocational training development and its decentralisation to the local level with a view to reacting more flexibly to the needs of the labour market. The programme has also triggered off motivation and expectations among school staff and students and allows students to benefit from a wider knowledge base and to make a more informed career choice. However, developing a legal framework for vocational education and training needs a more systemic and coherent approach to the reform process. This legal framework should state the national priorities, the roles, functions and responsibilities of actors and a clear policy to reform vocational training. The issue of social partnership should also be addressed in a systemic way based on the innovative experience gained through the programme. The PMU has become the Centre for the Development of Vocational Training with the task of continuing the process of vocational education and training reform.

Outcomes and outputs

a) **Curricula:**

- Development work of the new curricula took place in **25 pilot schools and 50 demonstration schools.**
- Curricula covered occupations from **19 sectors** - all those that were deemed to be important for Romania at the start of the programme. Through the reform the number of occupations was reduced from 192 to 134.
- **Curricula** were developed, following a modular design, for both the skilled worker and technician levels (CEDEFOP/SEDOC levels 2 and 3).
- The **training standards** are conceived to ensure a broad training in the first year, narrower and deeper in the second year, with strict specialisation, in most cases, in the third year and eventually the fourth. The second and third year modules are interchangeable.
- The **sheer volume of documents** drafted and revised is impressive: 134 training standards, 259 curricula for technical subjects for the 1st to 4th year in vocational schools and 132 for the 1st to 3rd year in post high schools, 60 didactical units for technical subjects, 434 didactical portfolios for technical subjects plus 80 work projects for the 1st to 3rd year in vocational schools, 455 didactical portfolios for the 1st year in post high school and 22 curricula for general subjects to be taught in the 1st to 3rd year in vocational schools.

b) **Teacher training:**

- The **training** provided through the programme to key actors was a large-scale operation, involving curriculum authors, teachers, school managers, school inspectors, as well as policy-makers and social partner representatives. More than 3000 participants have benefited from in train-the-trainers or "cascading" dissemination events both abroad and in all parts of Romania.
- The courses were based on an interactive, experience-based type of training. Much emphasis was placed on the teacher as a professional.

c) **Upgrading of equipment:**

- Funds earmarked for **equipment** procurement amounted to 72% of all Phare VET Reform programme funds (€ 18 million). Given the size of this operation, the procurement process was handled in an effective way by means of an external procurement agent.
- Evidence shows that efficient use is being made of the equipment procured to all pilot and demonstration schools.
- All the 75 schools benefited from the equipment-upgrading component.

d) **Institutional framework:**

- During the lifetime of the Phare programme a number of **new bodies and institutions** have been established. These include the National Council of Teacher Training, the Council of Occupational Standards and Accreditation (COSA), the National Service of Evaluation and Examination, the National Centre for the Development of Vocational Training, the National Council for Initial and Continuing Education, the National Agency for Employment and Vocational Training and the National Agency for Regional Development.
- The National Service for Evaluation and Examination was set up under a World Bank programme for the reform of general education. It defined an **examination** methodology based on testing students' abilities with specific work tasks. Employers form part of the evaluation boards in schools.
- As part of the overall education reform cycle, replication of the pilot school experience throughout the country has been enshrined in ministerial decrees. The **dissemination** process has started in 6 districts where pilot school teachers train other vocational teachers.

Findings

- Vocational education and training reform based on pilot/demonstration school approach has led to discrimination between schools inside and outside the programme. Two systems have been built in the country: the **elitist system** with EU standards and the old system with Romanian schools constituting 90% of all vocational schools. The economic crisis is the main constraint in the process of dissemination of the reform.
- The programme was still more oriented towards old concepts and occupations. The scope of the programme was found be **too large**, with too high an emphasis on **offer than demand** for vocational training, i.e. on traditional industries rather than newly emerging job profiles in future economic growth sectors.
- Based on a **survey** from 1998, the most successful programmes in terms of employability of school-leavers have been public catering, textile, ready-to-wear and car services, while the less successful included mechanics, mining, chemistry and agriculture.
- According to the evaluation report, the sophistication and clarity of the **guidance material** issued by the PMU staff is remarkable. Equally remarkable is the commitment and depth of understanding of the issues formulated in many curriculum policy and strategy documents.
- Teachers and managers from the pilot schools involved in the decentralised **curriculum development** process experienced a totally new collective learning process.
- In the new curricula, too little attention was paid, however, to the development of **entrepreneurial capacities**.

- The teaching and **learning materials** developed, including guidebooks and teachers' portfolios, student sheets and overhead slides, have considerably improved the support base for the learning process.
- There was little involvement in the **training** programme of both workshop instructors and trainers from companies, as well as teachers and managers from non-pilot schools. Problems also occurred as to the timing of some training, e.g. training on course design was delivered after first curricula had been drafted.
- Through the Phare programme and the related supply of **equipment** some schools have become financially independent to a large extent. The authors of the evaluation report suggest therefore that these schools pay a certain percentage of their income into a "solidarity fund" which is used to support facility upgrading in other schools.
- Two different sets of **occupational standards** have been or are being elaborated by the Ministry of Labour and the newly established COSA. Apart from the need for unification of the two through an inter-ministerial body, a number of Phare curricula will have to be revised to correspond to the new standards.
- The decision for a **nation-wide implementation** of the Phare curricula was taken in the absence of both a review of individual profiles against the actual labour market demand and the existence of the necessary prerequisites (teacher qualifications, training materials and equipment) in non-Phare schools.
- The implementation of the pilot school curricula in other schools will be extremely difficult under the given budgetary conditions. Responsibility has been shifted to country 'inspectorates'. Virtually **no Government funding** is available to support the curricular reform process and develop the educational infrastructure. Due to the lack of funding, the experienced team of teacher training experts from the Institute of Educational Research is not involved in the massive **dissemination** process required.

Recommendations

- As there is not yet a systematic, comprehensive and coherent approach to the vocational education and training reform process, **policy papers** have to be elaborated with a view to underpinning both dissemination and mainstreaming. These policy papers should be widely consulted and be driven through the political green and white paper stages.
- In this context, a review of the **institutional infrastructure** created partly under this programme has to be carried out to ensure both economies of scale and clearly defined mandates.

Annex 8: Main outcomes and findings from the Phare vocational education and training; education; research, science and technology (VETERST) in Bulgaria (BG9506)

a) Upgrading vocational education and training (€ 3.7 million);

b) Teacher Career Paths (€ 0.4 million); and,

c) Financing and Management of Secondary Education (€ 2.5 million) components.

Systemic and policy impact

The programme continuously supported education and training reforms in a highly difficult and unstable environment. Training and debates, involving policy-makers and other vocational training stakeholders at national level, led to the drafting of both an education policy paper, the terms of reference for the would-be National Agency for Vocational Training (NAVET) and the vocational training law. The latter was finally adopted after the expiry date of the programme (July 1999). The absence of a legal framework had hampered the introduction of pilot curricula into mainstream provision. Apart from information packages for non-pilot schools, the top-down dissemination strategy adopted by the consultants did not help the situation, while the opportunity to provide support for this process through the regional inspectorates was not fully used.

Outcomes and outputs

- Committed teachers managed to complete work on relevant, flexible and locally adapted standards and **course modules for 18** new instead of the planned **20–25 occupations**. Modules were developed by national groups with the help of foreign technical assistance and building upon a modular curriculum model that had been designed by an earlier Phare programme.
- These 18 new courses are now used by **41 schools** (10% of all vocational schools in Bulgaria), this including 5 non-pilot schools.
- In addition to occupation-specific modules, a number of compulsory or optional **core/common modules** have been developed, including communication, information technology, entrepreneurial skills and business studies, as well as health, safety and environmental standards.
- **Teaching and learning materials** were produced for all occupations, as well as **test specifications**.
- Teacher training was provided to apply new learning methodologies, as well as on the subject-matter and the use of the new equipment. A separate institutional structure, the so-called **Teacher Career Path centres** were set up for this project on the premises of selected schools, with no link to the national university teacher training system or the teacher re-qualification scheme. As a consequence, two of the three teacher training centres risk not to be sustained.
- A series of training events on daily issues of school management was held for **school directors** from pilot schools. These included financial management and issues of quality assurance.
- **Equipment** procurement was subject to a highly complex, bureaucratic decision-making process which resulted in considerable delays. In 5 out of 16 cases, the specifications were not appropriate to the schools' needs. In addition, problems may occur with regard to the servicing and maintenance of equipment bought from abroad.
- An innovative, decentralised **financing system** is operational in 4 regions covering approx. 90 secondary schools. The system is planned to be extended on a voluntary basis to another 20 regions. Prior to the introduction of the system over 200 people had been trained and later on another 500.
- An **Initiative Fund** was setup to finance competitive education projects, following the allocation pattern of the Hungarian National Training Fund. Funding totalled € 300,000 which sufficed to fund 69 projects. The positive results of the Initiative Fund at school level suggest a nation-wide extension of this facility.

An **Information Management Centre** was set up under the programme to inform and accompany the decentralised financing and management system, but is currently under-utilised. Its remit comprises co-ordination, exchange of experience, information collection and analysis from the pilot regions and the new regions.

Findings

- According to the evaluation report, **vocational training curricula** were developed in the absence of agreed, industry-based national occupation standards. Social partner representatives did not show any interest in being involved. Curricula were designed according to the same structure and methodology as used in the times of state-planned vocational training. "Job descriptions" (i.e. national standards) prepared by the Ministry of Education and Science later on did not correspond to those prepared by the Ministry of Labour and Social Policy.
- There is neither an **infrastructure** in place nor sufficient resources available to inform or underpin the modular curriculum system.
- At the time of writing the evaluation report, all documentation and equipment from the PMU office had been transferred to the Ministry of Education and Science but was not used in any way. A **database** of materials and good practice examples was supposed to be set up. However, according to the Ministry this task shall be transferred to NAVET. Also the European Training Foundation was asked in this context to work on such a database.
- There is no doubt that the **decentralised budget** approach is largely dependent on the fiscal and management capacity of each municipality. There are still some "pilot" schools where the new financing mechanism has not been put into practice.
- The **software** "AdminPro" used for the financial management system proved to be more useful for general schools while the software "Sparks" may be considered more suitable for vocational schools.
- Efforts to involve higher-level policy-makers from the Ministry of Labour and Social Policy or **social partners** in vocational training reform proved very difficult. Thus, it took the programme's Steering Committee until 1998 to get established. However, in some municipalities or communities this relationship works. They will also be represented on the board of NAVET.

Recommendations

Resources of the newly established **NAVET** will have to be considerably increased if the agency is to cope with all the mandates assigned to it. National vocational standards, as well as course **modules and materials** will have to be reviewed and registered, **teacher training** provision improved, the necessary support structure for both national and local **partnerships** of vocational training actors provided to function in a decentralised setting and Phare programme approaches and products collected and **disseminated**.

Annex 9: Main outcomes and findings from the 1994 Phare VET Reform programme in Slovenia (SL9405)

Systemic and policy impact

In contrast to other Phare countries, Slovenia had already developed a White Paper on Education in the early 90s and had started vocational training reforms prior to the start of the Phare programme. Thus, the Government was able to use the 1994 Phare vocational training programme to intensify and accelerate its own reform efforts. The programme has facilitated the involvement of social partners in the development and introduction of new secondary, post-secondary and tertiary curricula and institutions (including an apprenticeship system in selected sectors). It has also allowed the Slovene vocational community to be introduced to EU networks and developments and this in turn has contributed to adding a true European value to the curriculum reform. As the Phare programme was embedded in a national education reform programme, the reform process did not stop or loose speed or intensity even after its expiry. There is a strong desire and capacity to sustain and continue reform activities under the guidance of the Government. Finally, the Phare programme has clearly contributed to increasing awareness among both policy makers and social partners about the issues to tackle and the next steps to be taken in the reform process (see recommendations). The follow-up 1997 Phare programme has subsequently addressed these issues.

Outcomes and outputs

- **14 occupational families** covering (rather traditional) sectors, such as textile, agriculture, electronics, food technology, economics, catering, tourism, mechanics, construction, optics, leather, pharmacy, energy production and wood processing had been selected.
- **25 curricula** were developed and pilot-tested in **16 selected schools**.
- Curricula were designed by working groups set up in pilot schools and based on national **guidelines**.
- Curricula covered four **new types of vocational training programme**, including higher, non-university vocational training, vocational training bridging courses for graduates from general secondary education, apprenticeship (dual) system and a master craftsmen and foremen training system.
- The **apprenticeship system** was successfully piloted for 8 occupations. Training for these occupations is, however, continuously run in the school system, as well.
- **Training** was targeted at 6 groups, including school managers, curriculum co-ordinators, teachers and tutors (mentors) in companies. More than 120 people participated. In this context, also 26 teacher-trainers were selected and trained on an innovative project method - training for learning in the future technology (LIFT).
- The 16 schools successfully upgraded their **equipment** according to the requirements of the new curricula. The programme also identified both a standard and procedures for future equipment procurement.
- Strong **partnerships** between the Slovene pilot schools and **EU partners** were established and their activities based on written agreements. Some of the partnerships resulted in joint Leonardo projects.

- The introduction of **social partnership** in Slovenia's so far state-controlled vocational training system has been one of the greatest achievements. There was a good interaction, at the national level, between all players involved in the policy, curriculum development and other activities of the programme. In addition, **Regional Vocational Training Councils** were established on a tripartite basis in four pilot regions, whose sustainability is, however, at stake due to the lack of a clear legal status and sufficient funding.
- Slovenia also made use of Phare assistance to support the **institutional development** of the new CPI.
- Various **dissemination** activities, including a cascading training by pilot school teachers, regular meetings of school managers and teachers, workhops, seminars, conferences and the use of media, were carried out. The CPI has established a methodology for ongoing dissemination.

Findings

- Initial difficulties with the development of curricula due to an unfortunate sequencing of activities and problems with the TA had led to a delay and an overburdening of many actors. A major overhaul of the classification of occupations ("Nomenklatura") had not been undertaken before the **curriculum development** process started. Some of the newly developed curricula were not assessed to be as innovative as expected.
- However, especially the newly developed pathways (bridging programmes between the different streams of secondary education and higher vocational training programmes), as well as the involvement of social partners in curriculum development allow for the gradual development towards a **(labour) market-oriented vocational training system** comparable to those in EU Member States.
- It will be necessary to review and restructure the system of **occupational profiles** so as to take better account of the emerging needs of an internationally competitive economy in the context of constant change.
- The **teacher training** component suffered from the absence of a training needs analysis (teachers found training not sophisticated enough), its delayed delivery and the poor performance of some foreign experts. Challenges include the establishment of a modern pre-service and in-service vocational training teacher and trainer training system.
- However, selected 'Phare' trainers will deliver in-service training to other teachers in Slovenia.
- While the Chamber of Commerce was an active partner in the reform process, the trade unions are still not fully represented and active.

Recommendations

The following issues have to be addressed in the near future:

- a reform of both initial and in-service **teacher training** in vocational education,
- the high drop-out rates and related **quality** issues (especially in terms of the relation between theory and practice),
- the **decentralisation** and restructuring of the school system,
- the low **innovative capacities** of the system and, above all,
- the integration of formal and non/**informal learning** processes and qualifications.

Annex 10: Main outcomes and findings from the 1995 Phare VET programme in Albania (AL9506)

Systemic and policy impact

The project met its objective by improving the capacity of the vocational training system to deliver critically needed skills development to a small group of recipients. However, initiated reforms may deemed to be not sustainable without additional and significant financial and staffing assistance. Pilot projects were supposed to prepare for a larger Phare intervention in the vocational training sector which, however, did not materialise as expected due to political developments in the Balkan region.

Outcomes and outputs

- One vocational education school of the Ministry of Education and Science and one vocational training centre of the Ministry of Labour and Social Affairs were designated as pilot schools for the purposes of the Phare VET Reform Project. Each of these training providers covered the following:
- A **curriculum document** for each of the programmes was prepared. However, the further development of course syllabi, teaching materials and trainee materials was limited by lack of funds and capacity on the part of the Government employees.
- Training using **mentors** and through workshops was provided. It was considered a useful activity but was of insufficient duration.
- **Teachers** who were part of the curriculum research and development workgroups benefited from their contact with the technical assistance short-term experts and a study tour to Denmark. The processes observed were used when developing curriculum and preparing training materials upon their return.
- **Equipment and learning materials** were provided within the limits of the budget and time available. The amount allocated for each was not sufficient to cover the complete requirements of the courses being developed. For example, equipment of an expendable nature, such as simple handtools, were purchased internationally. Staff were aware that tools of the same type and of sufficient quality were available locally at considerably better prices.
- **EU fellowships** offered in Denmark and were considered successful by the participants. Senior staff benefited from a wide range of experiences. The focus of the training for teachers would have been more effective had more time been spent in their specialist areas.
- National workshops to **disseminate** the experiences of the pilot project were held and the information passed on. However, there did not seem to be any evidence of a reciprocal arrangement on the part of other pilot schools within the vocational training reform programme of the Government.
- The **Labour Market and Training Needs Analysis** activity assisted in the collection and analysis of data in 12 of the National Employment Service centres. The assistance provided a manual record of vacancies against applications and was used for statistical and forecasting purposes. However, the use of the information was restricted to developing labour market information and its analysis for projection of future needs. The data is not arranged in a format that can be readily accessed to facilitate in identifying vacancies for the unemployed or those being trained.

- **A Programme review conference** was organised in May 1998 which was attended by 43 participants, including Deputy Ministers.

Findings

- The civil unrest of spring 1997 caused major **disruption** to the timing of the project activities. However, this problem overcome by the positive and flexible attitude of all contributing parties involved in the project.
- The team who provided **technical assistance** to the programme expended considerable energy and effort unnecessarily on administrative and logistical problems, for example customs clearance. This detracted from the overall success of the project.
- Course length in each pilot school exceeded the duration of the project. **Funds** for the provision of equipment was not sufficient to cover the needs of the courses being developed.
- **Guidance and counselling**, as foreseen by the programme, was not addressed systematically by either training provider. Staff of each of the pilot locations were reluctant and/or unable to establish a linkage with the National Employment Service or the employers in their immediate vicinity.

Recommendation

At the final conference there was a huge consensus that the postponed follow-up 1996 Phare VET programme needs to be re-designed and implemented to take account of the new circumstances prevailing in Albania. It was recommended that the Phare VET Reform programme envisaged for 1996 be reactivated in 2000.